

DATE: May 16, 2000 **Revised April 29, 2003**

TO: Office of Drinking Water Staff

FROM: Joanne Vivas, SDWIS Administrator
Office of Drinking Water

THROUGH: Robert Taylor, P.E., Director
Office of Drinking Water

SUBJECT: Surveillance and Regulations – SDWIS

This memo replaces working memo #794 dated October 8, 1997.

Attached to this memo is the SDWIS Supplemental Instructions for ODW data entry. The supplemental instructions include the mandatory data entry requirements, as well as the naming conventions, that are important for searching the database and creating reports. Updating the SDWIS data elements described in this manual is a routine staff function and, at a minimum, shall be done at the time of the waterworks' inspection.

Any problems you encounter should first be brought to the attention of the Technical Services Engineer (TSE), or acting TSE, in your office then to the SDWIS Administrator in the Central Office.

Effective with the May 22, 2002 revision, Appendix D has been added to assist in identifying violations which must be entered in SDWIS and the violation data entry field formats pertinent to new or updated SDWA rules. For example, the May 22, 2002 revision includes information on the D/DBP and the IESWT Rules which must be used to report violations and enforcement actions for these rules.

This working memo serves as cover for all future updates to the SDWIS Supplemental Instructions.

Attachments

SDWIS ver. 8.0 SUPPLEMENTAL INSTRUCTIONS

Supplements User's Guide and SDWIS On-Line Help

May 16, 2000

Revised April 29, 2003

Attachment to Working Memo 823

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General information: Place the cursor on any field in SDWIS, press the F1 key on your keyboard for help on that field.

Ext. Sys. No. - The External System Number is a number assigned by SDWIS/STATE to differentiate rows of information in the database. It appears on several maintenance windows and in maintenance lists but cannot be edited. This unique number has no direct relationship to the water system number or other numbers for actions and inventory data.

Mandatory information is denoted by an asterisk (*) and indicates the minimum required information for adding a new record or modifying an existing record.

It is recommended that users set their workstation display desktop area to 1024x768 pixels so that expanded windows can be viewed. Otherwise, users must use the hot key equivalents to navigate certain screens as the buttons are not accessible. Where applicable, hot key combinations for buttons are provided in this manual.

This manual is divided into sections which correspond to modules in SDWIS.

- I. INVENTORY – Waterworks demographic information and water system infrastructure data
- II. LEGAL ENTITIES – Address and phone information for individuals, corporations, or government agencies that are associated with a waterworks.
- III. MONITORING AND NONCOMPLIANCE – Violation and Milestone data.
- IV. ENFORCEMENT – Module used to delete and modify Enforcement Actions.
- V. SAMPLING – Module used to record sample results
(Currently only 90th Percentile Lead & Copper and Chemical/Physical Parameter results).

I. INVENTORY

CLASSIFICATION DATA

The waterworks federal type classification (Community, Non-Transient Non-Community, Transient Non-Community) is calculated from four data elements that can be viewed from the “Classification Data” button on the Water System Inventory Modification screen.

When a change to one of these data elements significantly impacts the classification rules, a confirmation screen (Fig. 1) will display.

Although it is possible to override the *State* type by using the Change State Type button on this confirmation screen, it will not modify the *Federal* type. The Federal type is the only one used for reporting to Fed.

If one or more of the four required data elements causes SDWIS to classify the system as “Non-Public (NP)”, the user should make the necessary changes to return the system to an acceptable classification type (C, NTNC, TNC). Even if a system is inactive, it should NEVER be classified as non-public. See page 8 for operation permit revocation instructions.

The screenshot shows the 'Water System Type Maintenance' window. It contains a table for 'Water System' with columns 'No.', 'Name', and 'Activity Status'. Below this is a section for 'Water System Parameters' with a table of counts: Total Residential Population Count (25), Total Non Transient Population Count (0), Total Transient Pop Count (0), Total Wholesale Population count (0), Total Population Count (25), and Total Service Connection Count (1). At the bottom, there are three labels for 'Federal Water System Type Code', 'State Water System Type Code before Calculation', and 'State Water System Type Code Based on Above Entries', all showing 'NP'. There are three buttons: 'Change State Type', 'OK', and 'Help'.

Fig. 1

The four classification elements are listed below.

1. Population Served.....9
2. Service Connections11
3. Regulating Agency Assignments.....13
4. Active Sources of Water
 - Wells21
 - Consecutive Connections, Intakes, Springs25

If the changes made augment the number of required monitoring bacteriological samples, the TCR Sample Schedule Modification screen (Fig. 2) will display after exiting the 10-button screen. Always select “Make No Changes” hot key – Alt-N.

The screenshot shows the 'TCR Sample Schedule Modification' window. It contains a text box with instructions about inventory changes and TCR schedules. Below this is a section for 'Current Routine TCR Schedule - Desired Changes' with fields for 'Monitoring Requirement' (Samples Required: 0), 'Seasonal Period' (Start Month/Day: 0 / 0, End Month/Day: 0 / 0), and 'Effective Period' (Begin: MM/DD/YYYY, End: MM/DD/YYYY). There is also a section for 'Desired New TCR Schedule' with fields for 'Monitoring Requirement' (Samples Required: 2, Routine), 'Seasonal Period' (Start Month/Day: 1 / 1, End Month/Day: 6 / 30), and 'Effective Period' (Begin: 01/01/2003, End: MM/DD/YYYY). At the bottom, there are three buttons: 'Make NO Changes', 'Make Changes Indicated', and 'Help'.

Fig. 2

PRIMARY SOURCE CODE DETERMINATION METHOD - located in the top banner of the SDWIS Water System Modification Screen.

Each line in the matrix runs in sequence. If SDWS/State finds a source facility that meets the criteria of the first line, it types the PWS according to what is specified in the last column and does not consider anything else.

If SOURCE facility is _____ then WATER SYSTEM is _____

Availability Code	Water Type Code	Type Code	Primary Source Code
P, I, S, O, Blank	SW	not CC or NP	SW
P, I, S, O	SW	CC or NP	SWP
P, I, S, O	GU	not CC or NP	GU
P, I, S, O	GU	CC or NP	GUP
P, I, S, O	GW	not CC or NP	GW
P, I, S, O	GW	CC or NP	GWP
E	SW	not CC or NP	SW
E	SW	CC or NP	SWP
E	GU	not CC or NP	GU
E	GU	CC or NP	GUP
E	GW	not CC or NP	GW
E	GW	CC or NP	GWP

Availability code	Water Type Code	Type Code
P = Permanent	SW = Surface Water	CC = Consecutive Connection
S = Seasonal	GW = Groundwater	NP = Non-Piped
I = Interim	GU = Groundwater Under	
O = Other	Influence of Surface Water	
E = Emergency		

BASIC INFORMATION

- *1. Water System No. - Enter the nine-digit (alpha-numeric) identifying the Public Water System (PWS) assigned by the appropriate Office of Drinking Water Engineering Field Office.**
- | | | |
|------------|---|---|
| Digits 1-2 | = | State: |
| | | Use the Alpha abbreviation "VA" to represent Virginia |
| Digit 3 | = | Administrative State Region: |
| | | 1 = Abingdon; |
| | | 2 = Lexington; |
| | | 3 = Virginia Beach; |
| | | 4 = Richmond; |
| | | 5 = Danville; |
| | | 6 = Culpeper. |
| Digits 4-6 | = | Locality Code (See Appendix A) |
| Digits 7-9 | = | Sequence Number to be assigned by the Region where the PWS is located and should be assigned in such manner as to maintain alphabetical sequence using the PWS name. Once assigned, this number will not change. This number must be assigned by the Office of Drinking Water Engineering Field Office. |

For existing systems, the Water System Number is the PWSID number of the PWS preceded by "VA".

- *2. Alternate State No. – Required only:**
- A. If a TRANSIENT NON community system is under the jurisdiction of ODW, place a "D" in this field.
 - B. If any system should NOT have bacti forms generated, place an "N" in this field.
 - C. If a TRANSIENT NON community system under the jurisdiction of ODW should NOT have bacti forms generated, place both a "D" and an "N" in this field. (Do NOT use separation marks such as commas, periods, or spaces between the "D" and the "N".)
 - D. If the waterworks has a grandfathered permit, place a "G" in this field.
 - E. If a consecutive waterworks with a design capacity based on another waterworks, place a "B" in this field
- | | |
|-----|---|
| D | NC by DW |
| N | No Bacti forms |
| G | Grandfathered permit |
| DN | NC by DW and No bacti forms |
| GN | Grandfathered permit and No Bacti forms |
| DG | NC by DW and Grandfathered permit |
| DGN | NC by DW and Grandfathered permit and No Bacti forms |
| B | Consecutive with design capacity based on another waterworks |
| BN | Consecutive with design capacity based on another waterworks and No bacti forms |

A blank (empty) Alternate State No. will indicate that:

- A. Bacti forms SHOULD be generated
- B. If it is a TRANSIENT noncommunity system, it is under the jurisdiction of the local health department.

- *3. System Name - This is the name of the water system. For consistency and ease of alphabetical retrieval, the standard data entry conventions for this field are:**

Drop preceding articles (the or and a):

correct - Virginia American Water Co.

wrong - The Virginia American Water Co.

List cities and counties with name first:

correct - Roanoke, City of

wrong - City of Roanoke

correct - Caroline County

wrong - County of Caroline

4. Local Name - Not required.

- *5. Status - Use the pick list to select the activity status of the PWS (ACTIVE, INACTIVE, or PROPOSED)**

- *6. Activity Reason - This field has three text lines for entering a brief reason for changing the activity status. This field is required whenever the activity status of a water system is changed (i.e., from ACTIVE to INACTIVE).**

- *7. Date - The effective date of the active or inactive status of the PWS (#6. Activity reason). All dates must be entered in the format MM/DD/YYYY.**

8. Historical? - Not required.

9. Memo - Not required. Memo space for other information about the PWS.

10. Last Sanitary Survey Date - Not required and should **not** be used.

NOTE: Principal City Served and Principal County Served - The data that appears in these fields comes from the data entered in Related Geographic Areas. This data cannot be changed on the Basic Information screen.

- *11. Operating Category - Enter the appropriate waterworks classification for this PWS using roman numerals (I, II, III, IV, V, VI). Enter "NA" for Transient Non-Community systems.**

NOTE: Total Calculated Daily Pop - The number that appears in this field is calculated from data entered in Population Served. This data cannot be changed on the Basic Information screen.

12. All GW Protected - Not required. Do not check if system has multiple wells and at least one is GWUDISW.

13. Avg. Daily Production in GPD - Enter the annual average of the daily production in gallons per day in the most recent year for the PWS. – Not required.

- *14. Owner Type Code - Use the pick list to select the correct owner type:**

F - Federal Government

L - Local Government

M - Mixed Public/Private

N - Native American

P - Private

S - State Government

- *15. Total Design Cap. in GPD - This is the waterworks operation permit design capacity. If a waterworks has a grandfathered permit, use the default value of zero and place a letter "G" in the Alt. State Field. If a consecutive waterworks with a design capacity based on another waterworks, place a letter "B" in the Alt. State Field. (see Page 6)**

16. Total Emerg. Cap. in GPD - Not required.

NOTE: Calculated Total Storage Cap. in Gals (from Facility data) - The data that appears in this field is automatically calculated from data entered in Water System Facilities: Storage Facility: Approved Design Capacity. This data cannot be changed on the Basic Information screen.

When an operation permit is revoked:

Do not delete the PWS from SDWIS.

Inactivate the waterworks by changing the status, entering the date the permit was revoked and entering a reason (see page 7.)

However, do NOT inactivate sources for inactive waterworks except when a source is reassigned from an inactive to an active waterworks. Instructions:

1. Inactivate the revoked permit waterworks
2. Data upload to EPA requires that the waterworks be inactivated prior to any source activity changes. Therefore, after the waterworks has been inactivated, a data upload to EPA must occur (2/15, 5/15, 8/15, 11/15) before any changes to source activity are made. This ensures that the inactive status of the waterworks is recorded in the EPA database.
3. After successful EPA data upload, inactivate the source(s) in the inactive waterworks.
4. Add the source(s) in the active waterworks.

PERCENTAGES - This button is at the bottom of the BASIC INFORMATION data screen.

***1. Source Water Percentages** - Enter the source water percentages in the appropriate blocks.

***2. State Primary Source Type** - Use pick list to select the correct primary water source type:

Ground Water
Ground Water Purchased
Ground Water UDI Surface Water
Ground Water UDI Surface Water Purchased
Surface Water
Surface Water Purchased

CURRENT DATE - This button is at the bottom of the BASIC INFORMATION data screen. Selecting this button automatically enters the current calendar date in all date fields on the screen.

POPULATION SERVED

- *1. **Operating Period** - The Operating Period defaults to year around. Enter the operating period for a related population. Only one residential population is allowed for an annual operating period, and the annual operating period for residential population (code R) must be Jan. 1 - Dec. 31. Multiple operating periods are allowed.
- *2. **Population Served** - Use the pick list (by selecting "edit" then "add" from the drop-down menu bar) to enter the type(s) of population(s) served by the PWS and enter the total population for each type. More than one type of population may be served by a PWS. For example, a water system (such as a military base) may have both a permanent year-round population and a transient population.

NOTE: This information is used by SDWIS in determining the classification of the PWS (Community, Nontransient Noncommunity, or Transient Noncommunity). Always use the ACTUAL population, not permitted capacity. **Do not make changes that would cause the PWS to be classified as Non-Public (See Page 4).** If the changes made augment the number of required monitoring bacteriological samples, the TCR Sample Schedule Modification screen will display after exiting the 10-button screen. Always select "Make No Changes" hot key – Alt-N.

Populations Served:

- Non Transient
- Residential
- Transient
- Wholesale

Note: Wholesale population type is used to distinguish the total population that is served by a water treatment facility that is not retailed to a consumer. The wholesale population is not counted in the total calculated daily population field on the SDWIS/State Basic Information Screen. Nor is it counted by the R&R program for determination of number of bacteriological samples required per month.

Example: Purple Water Authority produces a finished water that is sold to the cities of Red Town and Blue Town. Red Town has a residential population type of 30,000. Blue Town has a residential population type of 60,000. Therefore, the Purple Water Authority has a wholesale population type with an estimated count of 90,000.

How-To Note: If you want to add more than one population with DIFFERENT Start/End dates, you have to enter them one at a time. So you would edit-add to get the screen with the Start/End date and then hit button Add Pop., add your population, then click the OK button (NOT the Add Pop. button again). Then repeat the edit-add process for the next population and it will accept different Start/End dates. If you want to enter more than one population with the same Start/End dates, you can just use the Add Pop. button for each type of population, but be aware this will make all populations entered in this manner have the same Start/End date.

SERVICE AREA CHARACTERISTICS

- *1. Service Area Name - Use the pick list (by selecting "edit" then "add" from the drop-down menu bar) to select the type(s) of service area(s) served by the PWS. More than one type of service area may be served by the PWS, however, only one must be identified as primary for classification purposes. The following is a list of service area names and their classification.

<u>Service Area Name</u>	<u>Name Code</u>	<u>Classification</u>	<u>Classification Code</u>
Mobile Home Park	MH	Residential	R
Municipality	MU	Residential	R
Sanitary Improvement District	SI	Residential	R
Homeowners Association	HA	Residential	R
Subdivision	SU	Residential	R
Residential Area	RA	Residential	R
Mobile Home Park, Principal Res	MP	Residential	R
Other Residential Area	OR	Residential	R
School	SC	Nontransient	NT
Institution	IN	Nontransient	NT
Medical Facility	MF	Nontransient	NT
Industrial/Agricultural	IA	Nontransient	NT
Day Care Center	DC	Nontransient	NT
Other Non-Transient Area	ON	Nontransient	NT
Retail Employees	RE	Transient	T
Recreation Area	PA	Transient	T
Service Station	SS	Transient	T
Summer Camp	SK	Transient	T
Restaurant	RS	Transient	T
Highway Rest Area	HR	Transient	T
Hotel/Motel	HM	Transient	T
Secondary Residences	SR	Transient	T
Other Transient Area	OT	Transient	T
Interstate Carrier	IC	Other	O
Wholesaler (sells water)	WH	Other	O
Dispenser	DI	Other	O
Water Bottler	WB	Other	O
Other Area	OA	Other	O

- *2. Primary - Highlight the service area to make primary. This indicates which area serviced by the PWS is considered primary for classification purposes. Click "make primary" from the edit menu after highlighting the appropriate service area. Only one service area can be made primary. If only one service area is added, that service area is automatically made primary by default.

Note: A Service Area can NOT be changed to another type once created. You must DELETE the existing area and add the appropriate area.

RELATED GEOGRAPHIC AREAS

- *1. Related Geographic Area Name - As a minimum, each PWS shall have a City/County, Region and District.

	<u>Geographic Area</u>	<u>Code</u>	<u>Definition</u>
	City	CT	City in which the PWS is located.
OR			
	County	CN	County in which the PWS is located.
AND			
	Region	RG	ODW Administrative State Region in which the PWS is located. (See Appendix A)
AND			
	District	DS	ODW Administrative State District to which the PWS is assigned. (See Appendix A)

When adding a Related Geographic area, use the pick list by selecting "edit" then "add" from the drop-down menu bar.

If incorrect Related Geographic Areas have already been assigned to an existing PWS (i.e., wrong city or county, wrong FIPS code, duplicate assignments, or areas with Unincorporated Area (UA) type codes), delete them from the Related Geographic Areas Maintenance List for that PWS and insure the correct Geographic Areas are added. If the Geographic Area you are searching for is not available, contact the SDWIS Administrator.

- *2. Primary and Principal - An area is primary if a water system provides most of the water system's production to the area. More than one area of a given type may be designated primary (e.g., a system provides 50% of the water systems' production to each of two cities). The principal area is selected from the list of primary areas, however, only cities and counties may be designated as principal. The principal city or county is the predominate city or county served by the water system .

SERVICE CONNECTIONS

- *1. Type - Use the pick list (by selecting "edit" then "add" from the drop-down menu bar) to select the type of service connections. Multiple types of service connections for each system may be entered. To modify an existing service connection, highlight the appropriate service connection type, and select "edit" then "change" from the drop down menu bar.

- *2. Number of Service Connections - Enter the number of service connections for each type for the PWS. The number of service connections is the *actual* number of service connections, as reported on the monthly operations report.

NOTE: When selecting a Service Connection, insure it represents the appropriate Classification for the service area. This information is used by SDWIS in determining the classification of the PWS (Community, Nontransient Noncommunity, or Transient Noncommunity). **Do not make changes that would cause the PWS to be classified as Non-Public (See Page 4).** If the changes made augment the number of required monitoring bacteriological samples, the TCR Sample Schedule Modification screen will display after exiting the 10-button screen. Always select "Make No Changes" hot key – Alt-N.

- *3. Meter Type - Use pick list to select the meter type. This refers to whether or not service connections are metered. If not known, select "unknown."
4. Meter Size - Not required.

POINTS OF CONTACT

- *1.** To add Points of Contact for the PWS, select “edit” then “add” from the drop-down menu bar. Contacts are searched for and selected from the Legal Entities search list. When searching the Legal Entities list for points of contact, type in the first few letters of the contact name and use “Display all types” for the search criteria. Highlight the desired Legal Entity and press the “Select” button to link this contact to the water system. Once you have made your selection, indicate the appropriate contact type(s) by using the check boxes displayed. See #2 below. To edit an existing point of contact, highlight the name, and select “edit” then “change” from the drop-down menu bar.

Please refer to the Legal Entities Section on page 30 for further instruction on the creation, modification and deletion of Legal Entities.

WARNING: This is a relational database and any changes made are statewide. Everyone uses the same list so be careful when adding or deleting legal entities.

- *2.** Active Contact Types - Mark the appropriate block(s) for the contact. Each PWS shall have, as a minimum, ADMINISTRATIVE, OWNER, DESIGNATED OPERATOR IN CHARGE, and SAMPLING. Each contact may be more than one contact type.

Explanation of types: (those marked with * are MANDATORY)

***Administrative** – Person(s) who handles administrative matters and receives NOVs, compliance documents, etc. Usually the owner. Can have more than one per PWS.

***Designated Op in Charge** – (Mandatory for C and NTNC waterworks). The LICENSED person who serves as the Operator in Charge. Only one per PWS. If the waterworks (NC) does not have a licensed operator, do not select a Designated Op in Charge contact type. Other non-licensed operators may be identified as an Operator type.

Emergency Contact - Person to contact in an emergency. Can have more than one per PWS.

Financial - Leave Blank!!!! Do not use under any circumstances.

Lead Engineer - Person who serves as the lead engineer.

Legal - Reserved for legal representative (lawyer).

Operator - Operator of the water system. May or may not be licensed. Can have more than one per PWS.

***Owner** - Owner of the PWS (on permit). Can be individual, corporation, etc. Normally, only one per PWS. If there are multiple owners, please consult the SDWIS Administrator.

***Sampling** - Person responsible for sampling information. Only one per PWS. The address listed for this Legal Entity will be used when shipping bacteriological sampling containers.¹

¹**Note:** A sampling contact should be selected for all water systems that require sample containers/forms (including bacti and/or lead and copper). See the note on use of the Alt. State Field under INVENTORY – BASIC INFORMATION (Page 6) earlier in this document for instructions on what to do if a PWS does its own bacteriological testing and, therefore, does not need forms.

REGULATING AGENCY

NOTE: This information is used by SDWIS in determining the classification of the PWS (Community, Nontransient Noncommunity, or Transient Noncommunity). **Failure to select a Regulating Agency will cause the PWS to be classified as Non-Public (See Page 4).** If the changes made augment the number of required monitoring bacteriological samples, the TCR Sample Schedule Modification screen will display after exiting the 10-button screen. Always select "Make No Changes" hot key – Alt-N.

- *1. Regulating Agency - Each PWS must have the following three regulating agencies:**

VIRGINIA DEPT OF HEALTH

VA STATE ADMINISTRATIVE REGION (ODW Field Office #)

VA STATE ADMINISTRATIVE DISTRICT (Planning District #)

To add a regulating agency select "edit" then "add" from the drop-down menu bar.

- *2. Purpose - Enter DRINKING WATER PROGRAM.**

- *3. Active? - Mark this block to indicate yes.**

4. Establishment No. - Not required.

WATER PURCHASES

NOTE: This information applies only when the subject PWS purchases water. *Before this information can be entered, the subject PWS must have a consecutive connection (CC) entered as a water system facility. See Page 24.*

To ADD Water Purchase information, select "edit" then "add" from the drop-down menu bar, then use the search screen to search for the Seller Water System.

If a water purchase is from outside the state of Virginia, it is imperative that the out of state seller water system record adhere to stringent data entry rules enforced by SDWIS/FED. For that reason, please provide the seller's PWSID to your TSE. Your TSE will submit the request to the appropriate Central Office Personnel. Once the out of state seller's record has been created, you may choose it for your consecutive connections, however, **NO DATA ENTRY CHANGES SHOULD BE MADE TO THE "OUT OF STATE" RECORD.** Because a regulating agency can not be assigned to the Out of State record, it will not display in search lists, you must enter the PWSID into the "Water System No." field; not select it from the search list.

- *1. Active Date - The date that the water contract was established between the buyer and seller.**
- *2. Purchase Purpose - Use the pick list to select the purpose or reason for the water purchase.**
 - Explanation of purposes:
 - Primary - Principal source (permanent and primary)
 - Interim - Temporary source (non-permanent)
 - Emergency - Emergency source (permanent)
 - Partial - Supplemental source (permanent, but not primary)
 - Seasonal - Source used only at certain times of the year (permanent)
- 3. Inactive Date - The date the consecutive water connection is no longer active. Not required unless it is inactive.
- *4. Type of Water - Use the pick list to select the type of water purchased:**
 - Ground Water
 - Ground Water UDI Surface
 - Surface Water
- *5. Water Finish - Use the pick list to select the purchased water finish. The water finish is defined as the degree of treatment that the purchased water has received:**
 - Finished
 - Partial
 - Raw
- *6. Water Treated by Seller - Mark this block to indicate "yes" if the water is treated by the seller prior to delivery to the buyer.**
- 7. Water Quantity - Not required.
- 8. Quantity Unit - Not required.
- 9. Max. Daily Purchase Rate - Not required.
- 10. Rate Unit - Not required.

- *11. **SELLER TO PURCHASER FLOW** – Click the **SELLER TO PURCHASER FLOW** button to enter the Purchase Facility Relationship Maintenance screen which allows you to choose a receiving consecutive connection facility and a supplying water system facility, i.e., a Purchaser Facility and a Seller Facility. Highlight the appropriate consecutive connection facility in the Purchaser Water System/Facility Information group box and then highlight the appropriate supplying facility from the Seller Water System/Facility Information group box. Click on OK to establish the relationship. This relationship is essential for Migration to SDWIS/FED to properly count the consecutive connections in your data transfer file.

A relationship is successfully created if receiving and supplying facility names are listed on the Water Purchase Maintenance Screen.

Water Purchase Maintenance - Change

Purchaser Water System/Facility Information

No.	VA4087125	Name	CITY-COUNTY CONTRACT (HENRICO)		
Federal PWS Type	C	State PWS Type	C	Primary Source	SW
Receiving Facility	CON. CONNECTION, RICHMOND		State Asgn ID No.	CC020	

Seller Water System/Facility Information

Seller ID	VA4760100	Seller System Name	RICHMOND, CITY OF		
Federal PWS Type	C	Supplying Facility	DISTRIBUTION SYSTEM		

Purchase Details

Active Date	07/01/1979	Purchase Purpose	PRIMARY		
Inactive Date		Type of Water	SURFACE WATER		
Water Finish	FINISHED	<input checked="" type="checkbox"/> Water Treated By Seller			
Water Quantity	30000000	Quantity Unit	GALLONS PER DAY		
Max Daily Purchase Rate	40000000	Rate Unit	GALLONS PER DAY		

Buttons: Seller to Purchaser Flow, OK, Cancel, Help

*Active Date – enter the date the purchaser starts to buy water from the seller.

Click on OK to establish the relationship to the Water Purchase Maintenance window. Then select File-Exit to return to the main men.

WATER SYSTEM FACILITIES

Each PWS will have a variety of water system facilities. Specific information is then entered for each water system facility listed. All PWS shall have, at a minimum, the following water system facilities:

- Storage facility
- Source
- Entry Point
- Distribution System

Other water system facilities that may be applicable to a specific PWS shall also be entered.

NOTE: The data entry screens for each type of facility are, for the most part, similar. To ADD a Water System Facility, select "edit" then "add facility" to select the type of facility to add.

ADDING A STORAGE FACILITY

BASIC INFORMATION

- *1. Facility Name - Enter the name of the facility. (For example, Elevated Tank #1) If there are multiple tanks physically located at one site, you MAY enter ONE storage facility and designate the name as # of tanks – volume (ex: 3 – 5,000 gal. Tanks). You MAY enter each tank individually also, if so desired.**
- 2. Local Name - Not required.
- *3. State Asgn. No. – Naming convention dictates this field begin with the letters "ST" followed by incremental 3 digit numbers. (Ex. ST001, ST002, ST003) The number must be unique within the PWS.**
- 4. FINDS No. - Not required.
- *5. Storage Type - Use the pick list to select the appropriate storage facility type:**
 - Bladder**
 - Elevated**
 - Ground**
 - Hydropneumatic**
 - Reservoir**
 - Standpipe**
 - Underground**
- 6. Pump Type - Not required ; Use the pick list to select the type of pump pumping water into storage facility, if desired:

Centrifugal	Hand pump
Jet	Positive Displacement
Screw	Submersible
Vertical Turbine	

NOTE: Pump Stations in the Distribution System MUST be entered as Pump Facilities. See page 24 for instructions on adding All Other Facilities. Selecting a pump type in the Storage Facility does not preclude user from adding it as a pump facility.

***7. App Des Cap - (Approved Design Capacity) - Enter the effective volume of the storage facility. The data entered in this field is used to automatically calculate the Calculated Total Storage Cap. in Gals that is displayed on the Basic Information screen for the PWS.**

***8. Unit - Enter the measurement unit of the approved design capacity.**

9. Constructed - Not required.

10. Emerg. Power? - Not required.

***11. Water Type - Use the pick list to select the appropriate water type.**

Ground Water
Ground Water UDI Surface
Surface Water

***12. Availability - Use the pick list to select the appropriate availability indicator:**

Emergency - (Used for a permanent emergency storage)
Interim - (Used for a temporary interim storage)
Other
Permanent - (Permanent storage)
Seasonal - (Used for seasonal storage)

***13. Activity Status - Use the pick list to select the appropriate activity status for this facility. If "proposed" or "inactive" are selected, a brief explanation must be entered in the "Reason" block.**

Active
Inactive
Proposed

***14. Activity Date - Enter the date of the latest activity status of this water system facility (MM/DD/YYYY).**

15. Reason - Not required, unless "proposed" or "inactive" are selected for an Activity Status.

16. River Reach Info - Not required.

NOTE

CURRENT DATE: This button is at the bottom of the Storage Facility Maintenance data screen. Selecting this button automatically enters the current calendar date in **all** date fields on the screen.

Once the **BASIC INFORMATION** for the Water Storage Facility is entered and OK is clicked, a 7 button screen will appear. The other six buttons are listed below:

ANNUAL OPERATING PERIODS - Optional.

FACILITY FLOWS – Optional see Page 30.

STORAGE DETAIL

1. Construction Material - Not Required.
2. Coating Type - Not Required.
- *3. Effective Volume Measure - Enter effective volume of storage tank.**
- *4. Measure Unit - Enter unit of measure for Effective Volume Measure.**
5. Covered Indicator - Not Required.
6. Altitude Valve Indicator - Not Required.
7. Pressurized Indicator - Not Required.
8. Overflow Elevation Measure - Not Required.
9. Total Elevation Head - Not Required.

FACILITY CONTACTS - Optional.

LOCATIONAL INFORMATION - Optional. See Page 27 of this working memo.

SAMPLING POINT - Optional.

ADDING A TREATMENT PLANT FACILITY

A Treatment Plant Facility (TP) shall be added for each treatment process or group of treatment processes at any given location. For example, a conventional water treatment plant would be entered as one "TP" facility and all unit processes (Chlorination, Sedimentation, Filtration, etc.) listed accordingly within that facility. Simple hypochlorination at a well would also necessitate adding a Treatment Plant facility with the one unit process listed. Hypochlorination and iron sequestering would be added as one "TP" facility with both unit processes listed. If the treatment is applied at a different location, a separate "TP" facility must be added (e.g., if a well is chlorinated at the well head discharge line and then filtered one mile downstream, two Treatment Plant facilities must be added).

BASIC INFORMATION

- *1. Facility Name** - Enter the name of the facility. (For example, Treatment Plant #1)
 - 2. Local Name - Not required.
- *3. State Asgn. No. – Naming convention dictates this field begin with the letters "TP" followed by incremental 3 digit numbers. (Ex. TP001, TP002, TP003) The number must be unique within the PWS.**
 - 4. FINDS No. - Do not use. EPA database #.
 - 5. Constructed - Not required.
- *6. Type - Treatment Plant (default entry)**
 - 7. Emerg. Power? - Not required.
 - 8. Non Piped Facility Type - Not required.
- *9. App Des Cap - Enter the approved design capacity for this facility.**
- *10. Unit - Enter the unit of measurement for the approved design capacity.**
 - 11. Pump - Not required.
- *12. Water Type - Use the pick list to select the appropriate water type:**

Ground Water	Ground Water UDI	Surface	Surface Water
--------------	------------------	---------	---------------
- *13. Availability - Use the pick list to select the appropriate availability indicator:**

Emergency - (Used for a permanent emergency storage)		
Interim - (Used for a temporary interim storage)		
Other	Permanent - (Permanent storage)	Seasonal- (Used for seasonal storage)
- 14. No Treatment – Not Required.
- 15. Seller Treatment – Not Required.
- 16. Directions – Not Required.
- *17. Activity Status - Select the appropriate activity status for this facility. If "proposed" or "inactive" are selected, a brief explanation must be entered in the "Reason" block.**
- *18. Activity Date - Enter the date of the latest activity status of this water system facility (MM/DD/YYYY).**
 - 19. Reason - Not required, unless "proposed" or "inactive" are selected for an Activity Status.
 - 20. River Reach Info - Not required.

Once the **BASIC INFORMATION** for the Treatment Plant Facility is entered and OK is clicked, an 9 button screen will appear. The other seven buttons are listed below:

ANNUAL OPERATING PERIODS - Optional.

FACILITY FLOWS – Optional see Page 30.

***TREATMENT UNIT PROCESSES** - To ADD a Treatment Unit Process, select “edit” then “add” from the drop-down menu bar.

***1. Unit Process Name** - Enter the name of the treatment unit process (for example: **CHLORINATOR #1**). There may be more than one treatment unit process associated with a treatment plant facility.

***2. Type** - Use the pick list to select the type(s) of treatment unit process:

	Aerator
	Chemical Feeder
	Clearwell
	Disinfection
	Distribution System
	Filter
	Flocculation
	Flash Mix
Never Use	Generic Unit
Never Use	Package Unit
	Sedimentation
	Sludge Handling
	Tube Settlers

You **MUST** assign at least one treatment objective to each treatment unit process selected.

Once the treatment unit process has been added, select **ASSIGN TREATMENT OBJECTIVE/PROCESS** from the drop-down menu bar or double-click on the Treatment Unit Process in the list. Add a Treatment Objective by using the pick list (select “edit” then “add” from the drop-down menu bar) to select the appropriate Treatment Objective for that Treatment Unit Process. More than one treatment objective can be added for a Treatment Unit Process, however only one treatment objective can be designated as primary.

NOTE: By system default, the FRDS data regarding treatment units is located under a single “Generic Unit” Treatment Unit Process. This data will need to be deleted and updated, so that each of the different treatments will have its own “Treatment Unit Process” and subsequent “Treatment Objective.”

3. The remaining treatment unit process information is optional. Press F1 for definitions of fields. Fill at your own risk. Use units found in definitions.

UNIT PROCESS FLOWS - Optional.

FACILITY CONTACTS - Optional.

***LOCATIONAL INFORMATION** – **Mandatory** - See **Page 27 of this working memo.**

***SAMPLING POINT** – Conditionally mandatory. Mandatory if monitoring is required, otherwise optional. See Page 28 of this working memo.

MICROBIAL REMOVAL – Optional. Can be used for recording disinfection profile spreadsheet data and recycled filter backwash water data.

ADDING A WELL FACILITY: BASIC INFORMATION

- *1. **Facility Name** - Enter the name of the facility. (For example, Well #1 Over the River, Well #2 Under the Bridge)
- 2. Local Name - Not required.
- *3. **State Asgn. No.** - Naming convention dictates this field begin with the letters "WL" followed by incremental 3 digit numbers. (Ex. WL001, WL002, WL003) The number must be unique for the PWS.
- 4. FINDS No. - Not required.
- 5. Constructed - Not required.
- *6. **Type - Well (default entry).**
- 7. Non Piped Facility Type - Not required.
- 8. Emerg. Power? - Not required.
- *9. **App Des Cap** - Enter the approved design capacity for the well.
- *10. **Unit** - Enter the appropriate measurement units for the approved design capacity.
- 11. Pump - Not required.
- *12. **Water Type** - Use the pick list to select the appropriate water type:
Ground Water Ground Water UDI Surface Surface Water
- *13. **Availability** - Use the pick list to select the appropriate availability indicator:
Emergency - (Used as a permanent emergency source)
Interim - (Used as a temporary interim source)
Other Permanent - (Permanent source) Seasonal - (Used as a seasonal source)
- 14. No Treatment – Not Required.
- 15. Seller Treatment – Not Required.
- 16. Directions – Not Required.
- *17. **Activity Status** - Select the appropriate activity status for this facility. Do not set activity to "active" or "inactive" unless you enter the locational information (see page 27). You may set the activity to "proposed" without locational information. If "proposed" or "inactive" are selected, a brief explanation must be entered in the "Reason" block. One water source type facility (well, spring, intake or consecutive connection) must have an 'active' status for a PWS with 'inactive' status or the waterworks will be classified as "NP" Non-Public, which is not permissible (see page 4). If the changes made augment the number of required monitoring bacteriological samples, the TCR Sample Schedule Modification screen will display after exiting the 10-button screen. Always select "Make No Changes" hot key – Alt-N.
- *18. **Activity Date** - Enter the date of the latest activity status of this water system facility (MM/DD/YYYY).
- 19. Reason - Not required, unless "proposed" or "inactive" are selected for an Activity Status.
- 20. River Reach Info - Not required.

NOTE: If two or more wells come together in a common discharge before entering the distribution system (i.e., an entry point), see instructions on Page 24 for entry of a Sample Station Facility.

Once the **BASIC INFORMATION** for the Well Facility is entered and OK, a 10 button screen will appear. The other nine buttons are listed below:

***LOCATIONAL INFO** – See Page 27 of this working memo.

ANNUAL OPERATING PERIODS - Optional

***FACILITY FLOWS** – Mandatory for UCMR Systems see Page 30.

FACILITY CONTACTS - Optional.

WELL DETAIL (*Fields are mandatory for NEW wells only.)

- *1. Well ID No. – Must be same as State Asgn ID No.
- *2. Diameter in Inches – Enter Largest Diameter of the Drill Hole.
- *3. Grout Depth in Ft – Enter the Depth of Grouting in Feet.
- *4. Draw Down Depth Ft – Enter stabilized drawdown depth in Feet.
- *5. Depth At Completion in Ft – Enter total depth of drilled well.
- *6. Pump Capacity GPM – Enter pumping rate of well pump at design conditions.
- *7. Pump Type – Enter pump type (i.e., submersible, vertical turbine, etc.)
- *8. Yield in GPM – Enter stabilized yield as determined during drawdown test.
- *9. Type – Use the pick list to select the appropriate type:
 - Drilled
 - Horizontal Gallery
 - Open End
 - Open Hole (Use this type for a Bored well)
 - Sand Point
 - Walled
 - Other
- 10. Well Covering - Not required.
- *11. Static Water Level Depth in Ft – Enter static water level depth measured prior to drawdown test.
- *12. Static Wtr Depth Obsrvtn Date – Enter the date observed for number 11 above.
- 13. Well Use - Not required.

WELL SCREENS – *Fields are Mandatory for NEW wells only. To ADD a Screen, select “edit” then “add” from the drop-down menu bar.

- *1. Identification Code –Naming convention dictates this field begin with the letters “AQ” followed by incremental 3 digit numbers. (Ex. AQ001, AQ002, AQ003) The number must be unique for the PWS.
- 2. State Aquifer Code - Not required.
- 3. Aquifer Type - Not required.
- 4. USGS Aquifer Code - Not required.
- 5. USGS Aquifer Name - Not required.
- *6. Depth to Screen Top in Ft
- *7. Screen Type
- *8. Depth to Screen Bottom in Ft
- *9. Lithology Type
- *10. Depth To Top of Aquifer in Ft
- *11. Confinement Indicator
- *12. Aquifer Thickness in Ft

WELL CASING - *Fields are Mandatory for NEW wells only.

- *1. Casing Diameter in Inches
- *2. Casing Depth in Ft
- *3. Casing Type – Enter type of casing (i.e., Heavyweight Steel, PVC, etc.)

Note: For multiple casings, list total depth in “Casing Depth in Ft”. For “Casing Type” enter all diameters separated by commas (EX: 6", 4", 2") and leave “Casing Diameter in Inches” blank.

WELL LOGS - Optional.

***SAMPLING POINT - See Page 28 of this working memo for instructions on establishing a raw water sampling point.**

ADDING AN "ALL OTHER FACILITIES" FACILITY

BASIC INFORMATION

- *1. **Facility Name** - Enter the name of the facility. For Example, "EP – Wells 1 & 2"; for multiple DS facilities name according to water seller or treatment plant. (EX: "DS – Richmond", "DS – ARWA", "DS – South Rivanna WTP")
- 2. **Local Name** - Not required.
- *3. **State Asgn. No.** - Naming convention dictates this field begin with the two letter code (CC - Consecutive Connection, IN - Intake, PF – Pump Facility, etc.) for the particular facility followed by incremental 3 digit numbers (Ex. CC001, PF001, PF002) WITH THE EXCEPTION OF ENTRY POINTS. Entry Points shall be a Sampling Station Facility Type (SS) and named EP_ __. The number must be unique within the PWS.
- 4. **FINDS No.** - Do not use. EPA database #.
- 5. **Constructed** - Not required.
- *6. **Type:** Select the appropriate type from the selection list. Please note that SDWIS defaults to the middle of the pick list and highlights the option "OTHER". You may scroll Up and Down to find the other entries.

All Entry Points shall be defined as a SAMPLING STATION Facility *and a sampling point must be created for that facility* (See Page 28). The sampling point must also be named EP_ __, using the same number assigned to the SS facility.

All Water Systems must have a Distribution System (DS) Facility Type. The DS Facility must have a Sampling Point associated named "COMPL" for complaint samples. All complaint samples should be assigned a location code of "COMPL" on the laboratory analysis input form.

Type Code	Water System Facility Type	Valid Water Type Code
CC*	Consecutive Connection	Any; mandatory entry
CH	Common Headers	Any
CS	Cistern	Any
CW**	Clearwell	DO NOT USE
DS	Distribution System/Zone	Any
IG*	Infiltration Gallery	SW, GWUDI, GW
IN*	Intake	SW
NP*	Non-Piped	Any; mandatory entry
OT**	Other	DO NOT USE
PC	Pressure Control	Any
PF	Pumped Facility	Any
RC*	Roof Catchment	GW
RS*	Reservoir	Any; mandatory entry
SI	Surface Impoundment	Any; mandatory entry
SP*	Spring	Any
SS	Sampling station	Any
ST	Storage Facility	Any
TM	Transmission Main	Any
TP	Treatment Plant	Any
WH	Well Head	Any
WL*	Well	GW, GWUDI

*Use this type for definition of a public water system (active source of water).

**Never use these types: OT or CW (this is a unit process under treatment plant facilities)
Key: GW – Ground Water; GWUDI – GW under the direct influence of Surface Water; SW – Surface Water

Use PUMP FACILITY for all distribution pump facilities. All High Service/Finished Water Pumps at Water Treatment Plants are entered under Treatment Unit Processes.

- 7. Non Piped Facility Type - Not required.
- 8. Emergency Power – Not required.
- 9. App Des Cap - Enter the approved design capacity for this facility if applicable.
- 10. Unit - Enter the unit of measurement for the approved design capacity if applicable.
- 11. Pump - Not required.

***12. Water Type - Use the pick list to select the appropriate water type:**

Ground Water
Ground Water UDI Surface
Surface Water

***13. Availability - Use the pick list to select the appropriate availability indicator:**

Emergency - (Used for a permanent emergency storage)
Interim - (Used for a temporary interim storage)
Other
Permanent - (Permanent storage)
Seasonal- (Used for seasonal storage)

- 14. No Treatment – Not Required.

***15. Seller Treatment – Conditionally mandatory. Mandatory for Consecutive Connection Facilities**

- 16. Directions – Not Required.

***17. Activity Status - Select the appropriate activity status for this facility. If “proposed” or “inactive” are selected, a brief explanation must be entered in the “Reason” block. One water source type facility (well, spring, intake or consecutive connection) must have an ‘active’ status for a PWS with ‘inactive’ status or the waterworks will be classified as “NP” Non-Public, which is not permissible (see page 4). If the changes made augment the number of required monitoring bacteriological samples, the TCR Sample Schedule Modification screen will display after exiting the 10-button screen. Always select “Make No Changes” hot key – Alt-N.**

***18. Activity Date - Enter the date of the latest activity status of this water system facility (MM/DD/YYYY).**

- 19. Reason - Not required, unless “proposed” or “inactive” are selected for an Activity Status.
- 20. River Reach Info - Not required.

Once the **BASIC INFORMATION** for the Other Facility is entered and OK, a 6 button screen will appear. The other five buttons are listed below:

ANNUAL OPERATING PERIODS - Optional

***FACILITY FLOWS** – Mandatory for UCMR sources (SP and IN) - see Page 30.

FACILITY CONTACTS - Optional.

***LOCATIONAL INFO** – Mandatory for sources (CC, CS, IG, IN, NP, RC, SP). See Page 27 of this working memo.

***SAMPLING POINT** – Mandatory for Sampling Station (SS) Facility Types. For SS Facility Types, the “Location” box must describe the sample tap location (i.e., “Tap after Pressure Tank”). See Page 28 of this working memo.

LOCATIONAL INFORMATION

- *1. **Latitude and Longitude** - Enter the latitude DMS and longitude DMS location (in degrees, minutes, and seconds) for each facility. Precision should be to the nearest one hundredth second.
- *2. **Collection Date** – Enter Date that the Locational Information was determined
- *3. **Accuracy** – Enter a value of 5.00 if Collection Method (#4, below) is 014.
Enter a value of 10.00 if Collection Method (#4, below) is 016.
Enter a value of 25.00 if Collection Method (#4, below) is 018.
- *4. **Collection Method** - Use the pick list to select the appropriate method by which the latitude and longitude were determined for this facility. Use either:

<u>Code</u>	<u>Determination Method</u>
014	GPS Code Measurements (Pseudo Range) Differentially Corrected
016	GPS Code Measurements (Pseudo Range) Standard Positioning Service SA Off (Waypoint Averaging)
018	Interpolation Map (Dot On The Map)
- 5. **Source** – Use “51” Virginia – Not Required.
- *6. **Source Scale** – Choose “NA – Scale Not Applicable” if collection method is 014 or 016. Choose the appropriate scale if collection method is 018.
- *7. **Description Category** – Choose the appropriate code/category type.

Example:

<u>Code</u>	<u>Category Type</u>
003	Other (Spring, Consecutive Connection, etc.)
026	Well
030	Intake Pipe
- *8. **Horizontal Datum** – Choose the appropriate datum. Choose “002 – NAD 83” if collection method is 014 or 016. Choose "001 - NAD 27" if collection method is 018.
- *9. **Point Line Area** – Choose “001 – Point” for a single location.
- 10. **Verification** – Not Required.
- 11. The remaining data entry fields for LOCATIONAL INFO are not required. HOWEVER, if you choose to enter information in the Vertical Data section, you must enter a value for ALL fields in that section or the record will produce an error when uploaded to SDWIS FED.

SAMPLING POINT INFORMATION

From the Water System Facilities Maintenance list (Water System Facilities button), double click the desired facility. At the next screen (Water System Facility Modification), click the Sampling Point button. To ADD a Sampling Point, select "edit" then "add" from the drop-down menu bar. *A Sampling Point is always linked to a facility.*

At a minimum, the following sampling point types are required to be linked to a facility.

Sampling Point Type	Facility Type	Analyte Group Code (Ex.)
Entry point	Sampling Station (SS) Facility	IOCM, RAD, VOC, etc.
Raw Water Source	Intake (IN), Well (WL), Spring (SP)	DBP
Unit Process	Treatment Plant Facility (TP)	DBP
Distribution System	Distribution System (DS)	TTHM, HAA5
Max Residence Time	Distribution System (DS)	TTHM, HAA5

- *1. **Sampling Point.** - Enter a unique number for each sampling point per facility. Naming convention dictates this field begin with the two letter code (EP – Entry Point, RW – Raw Water Source, UP – Unit Process, DS – Distribution System, MT – Max Residence Time, PC – Process Control.) for the particular sampling point type followed by incremental 3 digit numbers (Ex. EP001, RW001, UP002) .

TOC and alkalinity raw water samples shall be recorded under a raw water (RW) sampling point (Source Water Type - Raw) whether it is linked to a source (IN or WL) or treatment plant (TP) facility depending on where the sample point is physically located. TOC samples collected from the treatment plant filtered water shall be under a unit process (UP) sampling point linked to a treatment plant (TP) facility.

D/DBP Rule Special Case - The D/DBP Rule requires waterworks that receive finished water from different treatment plants to collect individual sets of TTHM and HAA5 samples and each set of samples must be determined to comply with the PMCL. Such waterworks must have two (or more) distribution system (DS) facilities listed in the facility inventory and TTHM/HAA5 sampling points created for each treatment plant. SDWIS must identify which facilities are linked together by flow path so the correct analysis results are associated with the appropriate source, treatment plant, entry point and distribution system facilities. See page 30 for linking the facilities by "Facility Flows".

- *2. **Location** - Enter the physical location of the sampling point (20 character limit). Ex: "Tap after Cl2", "filter #3 effluent", "combined filter eff.", "raw tap at lab sink", "well raw water". It is best to give detailed information in this field as this instructs the sampler of the specific sample tap location via the sample input form generated from R&R.

Note: If you have printed chemical forms from R&R for a specific location, do not edit the location name in SDWIS until the results have been received. Result records from DCLS will attempt to match on location. If a match is not found, a new sample point is automatically created.

- *3. **Sampling Point Type** – Use the above table as a guide to select the proper sample point type to a facility and analyte group. Use the pick list to select the appropriate type of sample for this sampling point:

Distribution System	Max Residence Time	Raw Water Source
Entry Point	Process Control	Unit Process

4. Note 1, 2 and 3 – text fields for additional information – Not required.

- 5. SDWIS/Fed Name – Do not use.**
- *6. Source Water Type – Select raw or finished as appropriate.**
- 7. Process Phase - Use the pick list to select the point during the treatment process phase (Before, During, or After) this sampling point represents.
- *8. Represents Distrib. System - Mark this block to indicate “yes” if this sampling point represents the distribution system.**
- *9. Post Disinfection - Mark this block to indicate “yes” if this sampling point is located after disinfection.**
- 10. Data Origin Code (Headquarters, Regional, State) – State is default**
- *11. Activity Status - Select the appropriate activity status for this sampling point. If “proposed” or “inactive” are selected, a brief explanation must be entered in the “Reason” block.**
- *12. Activity Date - Enter the date of the latest activity status of this water system facility (MM/DD/YYYY).**
- 13. Lead and Copper Tier Level - Not required.
- 14. Lead and Copper Tier Type - Not required.

FACILITY FLOWS INFORMATION

In order to trace the path of water flow through a waterworks, you must join contiguous facilities from source to distribution.

The idea is to make a flow path from one facility to another in relationship to water flow direction. For example:

The intake flows to treatment plant (IN → TP)

The treatment plant to the entry point (TP → SS)

The entry point to the distribution system (SS → DS)

Supplying	Receiving
Intake	Treatment Plant
Treatment Plant	Sampling Station
Sampling Station	Distribution System

NOTE: *This does not include unit processes.*

From the Water System Facilities Maintenance list (Water System Facilities button), double click the PRIMARY Source facility. At the next screen (Facility Modification), click the Facility Flows button. To ADD a Facility Flow, select “edit” then “add” from the drop-down menu bar.

Select Supplying and Receiving Facilities following the flow from each source to the sampling station (entry point facility).

II. LEGAL ENTITIES

Legal entities are individuals, corporations, or government agencies that are associated with a PWS. In order to link the name, address, and phone number of a legal entity in other areas of SDWIS (i.e., as point of contact, etc.), the information about the legal entity must first be entered in the Legal Entities module.

To access a legal entity record, open the Legal Entities Module and select "Edit" then "legal entity" from the drop-down menu bar list.

BEFORE ADDING A LEGAL ENTITY, search the legal entity list to insure duplicate persons are not entered. However, duplicate names at different organizations are acceptable.. When searching the Legal Entities list, type in the first few letters of the name (use last name if searching for an individual) and use "Display all types" for the search criteria.

WARNINGS: This is a relational database and any changes made are statewide. Everyone uses the same list so be careful when adding or deleting legal entities.

DO NOT DELETE a SDWIS User from the Legal Entities list. Doing so will also delete them as a SDWIS User.

Prior to deleting a Legal Entity, it must first be disassociated from all water systems.

ADDING AN INDIVIDUAL LEGAL ENTITY

To ADD an "Individual" type Legal Entity, select "edit", then "add" then "individual" from the drop-down menu bar in the Legal Entity Maintenance List window displayed after searching for a specific Legal Entity.

***1. Legal Entity Type - Individual (default value)**

- 2. Salutation - Optional.
- 3. Prof Qualification - Optional.

***4. Collector – Check (yes) if individual is a sampler.**

***5. First Name and Initial - Enter the individual's first name. Middle initial optional.**

***6. Last Name - Enter the individual's last name. Do not enter suffixes such as "Jr." or "III"**

- 7. Organization - Enter the name of the organization with whom the individual is affiliated.
- 8. Job Title - Optional.
- 9. Employer ID No. - Reserved for billing use.
- 10. Business E-Mail – The email address for the individual.

***11. Business Phone No. - Enter the phone number for the individual using the example format.**

- 12. Phone Extension - Enter the phone extension as applicable.
- 13. Fax - Enter the FAX number if available.
- 14. Emergency Phone No. - Enter the emergency phone number as applicable.

***15. Address Line One - Enter physical street address. Refer to Page 35, "Legal Entity Guidelines".**

***16. Address Line Two - Enter P.O. Box address (if applicable) or other address information such as apt. #, room, suite.**

***17. City - Enter city name.**

***18. State - Enter the state abbreviation.**

***19. Zip - Enter zip code.**

***20. Mail Stop – As necessary. Refer to Page 35, "Legal Entity Guidelines".**

- 21. Country – US (default value).
- 22. International Postal Code – Not required.

ADDING A GOVERNMENT AGENCY LEGAL ENTITY

To ADD a "Government Agency" type Legal Entity, select "edit", then "add" then "government agency" from the drop-down menu bar in the Legal Entity Maintenance List window displayed after searching for a specific Legal Entity.

***1. Legal Entity Type – Government Agency (default value)**

2. Sub-type Code - Optional.
3. EPA Region - Optional.
4. Employer ID No. – Optional.
5. Primacy indicator – **DO NOT MARK WITH A CHECK.** The only primacy agency is VA Department of Health.
6. Administrative ID Number – Optional.

***7. Name - Enter the Government Agency Name - Use the following standard data entry conventions, as applicable**

US Army
US Navy
Virginia Dept. of XXXXX
XXXXX County School Board
YYYYY, Town Of

8. Alias Name – Optional.

***9. Phone Number - Enter the phone number for the government agency.**

***10. Address Line One - Enter physical street address. Refer to Page 35, "Legal Entity Guidelines".**

***11. Address Line Two - Enter P.O. Box address (if applicable) or other address information such as apt. #, room, suite.**

***12. City - Enter city name.**

***13. State - Enter the state abbreviation.**

***14. Zip - Enter zip code.**

15. Country – US (default value)

16. International Postal Code – Not required.

ADDING OTHER LEGAL ENTITY

To ADD an "Other" type Legal Entity, select "edit", then "add", "other" from the drop-down menu bar in the Legal Entity Maintenance List window displayed after searching for a specific Legal Entity.

- *1. Legal Entity Type - Use the pick list to select the appropriate legal entity type:**
Company, Cooperative, Corporation, Homeowner's Association, Non-Profit, Rate-Set Utility, Trust
- *2. Name - Enter the name of the legal entity.**
 - 3. Employer ID No. - Reserved for billing use.
 - 4. Alias Name - Not required.
- *5. Phone No. - Enter the phone number.**
- *6. Address Line One - Enter physical street address. Refer to Page 35, "Legal Entity Guidelines".**
- *7. Address Line Two - Enter P.O. Box address (if applicable) or other address information such as apt. #, room, suite.**
- *8. City - Enter city name.**
- *9. State - Enter the state abbreviation.**
- *10. Zip - Enter zip code.**
- 11. Country – US (default value).**
- 12. International Postal Code – Not required.**

LEGAL ENTITY GUIDELINES

In an effort to keep data integrity and consistency in SDWIS, the following shall be followed:

Street Address information should be entered on **Address Line 1** in SDWIS.

A **Street Address is mandatory** for ALL samplers.

P.O. Box information should be entered on **Address Line 2** in SDWIS.

If a contact's P.O. Box and Street are in the same City, State, and ZIP, both P.O. Box and Street can be on the same record entered on the appropriate lines listed above. This will adhere to U.S. Postal Service guidelines that if both are present, the P.O. Box should appear directly ABOVE the City, State and ZIP line.

Example:

Mr. Joe Schmoe
1234 Frederick Drive
P.O. Box 123
Anytown, VA 44444

If a SA contact's P.O. Box and Street are NOT in the same City, State and ZIP, you must create TWO Legal Entity (Sampler) records for the INDIVIDUAL.. To differentiate between the Mailing (P.O. Box) and the Shipping (physical Street) addresses, a code of "M" for Mailing OR "S" for Shipping should be entered in the MAIL STOP field for the appropriate record. IF YOU HAVE AN "S" LEGAL ENTITY SAMPLER LINKED TO A WATERWORKS, YOU MUST ALSO HAVE AN "M" LEGAL ENTITY SAMPLER LINKED TO A WATERWORKS...and vice versa.

Example:

	Record 1	Record 2
Salutation:	Mr.	Mr.
First Name:	Joe	Joe
Last Name:	Schmoe	Schmoe
ADDR 1:	1234 Frederick Drive	
ADDR 2:		P.O. Box 123
City:	Anytown	OtherTown
State:	VA	VA
ZIP:	44444	55555
Mail Stop:	S	M

NOTE: "S" and "M" should be the ONLY codes used in the Mail Stop field and should ONLY BE USED in this specific situation where the Sampler (SA) does not have a mailbox at their physical Street Address (where the bottles are delivered) AND their P.O. Box Address is in a different City, State or ZIP. This is the only instance where there should be TWO Sampler Contacts (SA) for ONE water system.

Records are unique by the combination of First name, Last name, Organization, and Mail Stop. Legal Entities with the same name shall be differentiated by Organization.

III. MONITORING AND NON-COMPLIANCE

In order to have access to the "Monitoring and Non-Compliance" module, you must have compliance rights issued by the SDWIS administrator. Contact your TSE or Computer Information Systems Team (CIST) representative to insure that you have the proper SDWIS rights.

ADDING MILESTONES

From the Monitoring and Non-Compliance Module, select "edit" then "milestones" then "add". Then select the appropriate waterworks.

(You may select "Maintain" rather than "Add" to edit an *existing* milestone.)

***1. Data Origin - Use the default of "S" – State.**

***2. Milestone Date - Actual date Milestone occurred (MM/DD/YYYY).**

Note: For LCRMR, use effective date (April 11, 2000) if actual date is not available.

***3. Type – Choose from pick list – Use only the following items:**

DEEM	System Deemed Optimized without OCCT (see note)
DONE	System done with OCCT (see note)
LSLR	Lead service line replacement required
MIF	Must Install Filtration

Note: Refer to "State Implementation Guidance for the Lead and Copper Rule Minor Revisions" for further information on Milestone Types. The Milestones definitions used in the SDWIS picklist are incorrect, please refer to the following descriptions when reporting milestones:

DEEM really means "Deemed to have optimized corrosion control treatment"

DONE really means "All applicable LCR requirements met"

***4. Milestone Value – Mandatory for LSLR Milestone Types.**

***5. Reason Code – Conditionally mandatory. Required for Types DEEM and DONE. Choose appropriate item from pick list.** The definitions used in the SDWIS picklist for Reason Code are incorrect, please refer to the following descriptions to select the appropriate reason. Use the same Reason Code for the DONE Milestone as used for the DEEM Milestone. Use only the following three options:

B1	System serving 50,000 or fewer people that has met the lead and copper action levels during each of two consecutive 6-month monitoring periods.
B3	System which demonstrates for two consecutive 6-month periods that the difference between the 90th percentile tap water lead level and the highest source water lead concentration is less than 0.005 mg/l
WQP	System for which the State has set optimal water quality parameters.

6. Comment – Not required.

***7. Status – Use default value of "V – Validated".**

***8. Date – Use default of current date.**

ADDING VIOLATIONS

The violation type selection list has federally owned (SDWA) types as well as state owned (VAC) types. Federally owned types have a numeric type code, state types have alphanumeric codes. All violations, regardless of type, must be entered into SDWIS/State.

From the Monitoring and Non-Compliance Module, select "edit" then "violations" then "add". Then select the appropriate waterworks. See Appendix D Page 60 for data entry instructions for selected SDWA rules. See Appendix E Page 67 for violation data entry example of running annual average PMCL violations.

(You may select "Maintain" rather than "Add" to edit an *existing* violation.)

Data Entry Hint: On several screens in the module there are three ways to enter a date in a date field:

- a. Manually enter the date in the box.
- b. Click the small up or down arrows to the left of the box to increment/decrement the date by one day/month/year depending on which is highlighted.
- c. Click the large down arrow to the far right of the box to display a visual calendar for use in clicking the desired date. To advance or go back one month, click the left or right arrows on the horizontal scroll bar. To advance or go back one year, click to the right or left of the position indicator **on** the actual scroll bar.
- d. The violations screen is too large to be completely viewed on a monitor display that is not set to 1024x728. You may not be able to see the OK and Cancel buttons at the bottom of the entry/edit screen. The hot keys for these buttons are Alt-O for OK and Alt-C for Cancel.

pick lists are displayed by clicking the double right arrow button on the right side of the entry box

- *1. **Violation No.** – defaults to current federal fiscal year. First value is the Federal Fiscal Year (Oct. 1 – Sept. 30) of the Determination Date of the Violation. The second value is the sequential number of violations (by entry order) for the waterworks (all years). Although this field is editable, great care should be taken in modifying this four-digit federal fiscal year. The value entered in the Violation No. must match the federal fiscal year of the determination date, or an error will be generated that reads "Fiscal year must be same as/prior to current federal fiscal year."
- *2. **Determination Date** – Enter the date of the Notice of Violation – current date is the default. Entering a future date is not permitted.

This date determines the federal fiscal year which generates the first four digits of the violation number.

- *3. **SDWIS/FED Data Origin** – Use default of "S" for State.

***4. Type – enter type or choose from pick list**

This will automatically fill in the **Category** (such as MCL, monitoring, sanitary survey, public notice, etc.), **Name** (identifies the violation type code, and **Monitoring Violation Type** (e.g., Repeat, Routine) only if the violation is a monitoring violation.

Code	Violation	CP	VP
01	MCL, SINGLE SAMPLE	X	
02	MCL, AVERAGE WITH NO. EXCEEDANCE (DBP type)	X	
02	MCL, AVERAGE WITHOUT NO. EXCEEDANCE (The one you use!)	X	
03	MONITORING, ROUTINE MAJOR	X	
03	MONITORING, ROUTINE MINOR	X	
04	MONITORING, CONFIRMATION/CHECK MAJOR	X	
04	MONITORING, CONFIRMATION/CHECK MINOR	X	
05	NOTIFICATION, STATE	X	
06	NOTIFICATION, PUBLIC	X	
07	TREATMENT TECHNIQUES (NON-SWTR)	X	
08	VARIANCE/EXEMPTION/OTHER COMPLIANCE	X	
09	RECORD KEEPING	X	
09	RECORD KEEPING FOR INDI. FILTER /FBR		X
10	OPERATIONS REPORT	X	
11	MAX RES DISINFECT LVL (MRDL) NON-ACUTE	X	
11	MAX RES DISINFECT LVL (MRDL)	X	
11	MAX RES DISINFECT LVL (MRDL) MONITORING	X	
*12	QUALIFIED OPERATOR FAILURE (DBP)		X
13	MAX RES DISINFECT LVL (MRDL) ACUTE	X	
21	MCL (TCR), ACUTE	X	
22	MCL (TCR), MONTHLY	X	
23	MONITORING (TCR), ROUTINE MAJOR	X	
24	MONITORING (TCR), ROUTINE MINOR	X	
25	MONITORING (TCR), REPEAT MAJOR	X	
26	MONITORING (TCR), REPEAT MINOR	X	

Code	Violation	CP	VP
27	MONITORING, ROUTINE (DBP), MAJOR	X	
27	MONITORING, ROUTINE (DBP), MINOR	X	
27	MONITORING, (DBP) WITH NO. MISSING SAMP	X	
27	FAILURE TO HAVE MONITORING PLAN (DBP)		X
28	SANITARY SURVEY (TCR)	X	
29	FAILURE TO PRODUCE CPE (IESWTR)		X
29	FAILURE TO PRODUCE FILTER ASSESSMENT	X	
31	MONITORING, RTN/RPT MAJOR (SWTR-UNFILT)	X	
31	MONITORING, RTN/RPT MINOR (SWTR-UNFILT)	X	
36	MONITORING, RTN/RPT MAJOR (SWTR-FILTER)	X	
37	FAILURE TO PROFILE/CONSULT (IESWTR)		X
38	MONITORING, ROUTINE (IESWTR), MAJOR	X	
38	MONITORING, ROUTINE (IESWTR), MINOR	X	
39	FAILURE TO SUBMIT PLANT SCHEMATIC (FBR)		X
40	FAILURE TO PROPERLY RECYCLE (FBR)		X
41	MONTHLY COMB. FILTER EFFLUENT (SWTR)	X	
41	RES DISINFECT CONCENTRATION (SWTR)	X	
41	SINGLE COMB. FILTER EFFLUENT (SWTR)	X	
42	FAILURE TO FILTER (SWTR)		X
43	SINGLE COMB. FILTER EFFLUENT	X	
44	MONTHLY COMB. FILTER EFFLUENT	X	
46	INADEQUATE DBP PRECURSOR REMOVAL	X	
47	UNCOVERED STORAGE FACILITY (IESWTR)		X

*Type 12 - Only for systems that add disinfectant/chemical oxidant. Use VAC type B2 for systems that do not add disinfectant/chemical oxidant.

Key: CP = Compliance Period, VP = Violation Period.

Code	Violation	CP	VP
51	INITIAL TAP SAMPLING (PB/CU)		X
52	FOLLOW-UP OR ROUTINE TAP M/R (PB/CU)		X
53	WATER QUALITY PARAMETER M&R	X	
56	INITIAL/FOLLOW-UP/ROUTINE SRC WTR M/R		X
57	OCCT/SOWT RECOMMENDATION/STUDY		X
58	OCCT/SOWT INSTALLATION DEMONSTRATION		X
59	WATER QUALITY PARAMETER NON-COMPLIANCE	X	
63	MPL NON-COMPLIANCE (PB/CU)		X
64	LEAD SERVICE LINE REPLACEMENT (PB/CU)		X
65	PUBLIC EDUCATION (PB/CU)		X
71	CCR REPORT		X
72	CCR ADEQUACY/AVAILABILITY/CONTENT		X
75	PUBLIC NOTICE RULE LINKED TO A VIOLATION		X
76	PUBLIC NOTICE RULE NOT LINKED TO A VIOLATION	Do not use	

Key: CP = Compliance Period, VP = Violation Period

- *5. **Tier Level:** Use default unless the violation Tier level must be escalated due to extraordinary circumstances.
- *6. **Analyte Code:** Enter or choose from pick list
Individual – In some cases, this is automatically filled based on the Type selected in step 4 above. This should also be used for MCL violations.
Group – In general, use for monitoring violations (FTS – Failure to Sample) or where an individual selection is not applicable. See Appendix C Page 56.

NOTE: Bullets 7 & 8 are mutually exclusive, i.e. only use one or the other, never both.

7. **Compliance Period Begin Date/End Date (CP)** – Mandatory for all violations with a known compliance period end date as identified by an “X” in the CP column (see page 38). If you enter a compliance period begin date, do not enter a violation period begin date
8. **Violation Period Begin Date/End Date (VP)**– Mandatory for all violations that remain open until an SOX – return to compliance enforcement, action occurs. These are identified by an “X” in the VP column on page 38. The VP end date is the date of the SOX enforcement action status date. Always use violation period begin/end date when entering a VAC type violation. The end date will remain empty until the waterworks returns to compliance.

SDWA Type - Select a Monitoring Period from the Mon. Period pick list to auto fill the begin and end dates (preferred data entry method).

OR you can manually enter a begin and end date

OR enter a begin date and select a duration from the “duration” pick list to automatically enter the end date

DO NOT attempt to add Monitoring Periods to simplify this data entry, only the SDWIS administrator can add Monitoring Periods effective for the entire state.

VAC Type – VP Begin date is the determination date.

Code	Violation	VP
A0	NO WATERWORKS OPERATION PERMIT	X
A1	NO CONSTRUCTION PERMIT FOR MODIFICATION	X
A2	EXCEEDANCE OF PERMITTED DESIGN CAPACITY	X
A3	OPERATING FACILITY BEYOND PERMIT CONDITION	X
B0	NO BSSR	X
B1	FAILURE TO FOLLOW APPROVED BSSR	X
B2	LACKS LICENSED OIRC-NO DISF/CHEM OX ADD	X
B3	FAILURE TO FOLLOW MONITORING PLAN	X

Code	Violation	VP
B4	NO COMPREHENSIVE BUSINESS PLAN	X
B5	NO CCCP	X
B6	FAILURE TO IMPLEMENT CCCP	X
C1	FAILURE TO REPORT BY 10TH DAY OF MONTH	X
C2	NO STATE MANDATED SAMPLES SUBMITTED	X
C3	RELIABILITY PROBLEM	X
C4	LACK OF MONITORING EQUIPMENT	X
C5	FAILURE TO METER WATER PRODUCTION	X
C6	LESS THAN 20 PSI AT SERVICE CONNECTION	X

9. Violation Package Number – Not required.
10. Report to SDWIS FED? – Not required.

11. **Water System Facility/Sampling Point - DO NOT USE THIS FIELD!** Entering data in this field can potentially cause problems with the SNC list.
12. Analysis Result – Not required.
13. CFR No.– Not required.
- *14. **Issuing Agency – Always use default of Virginia Dept of Health.**
15. Rule – Not required. Is auto filled by type selection in some cases.
- *16. **Status – Use default of “V” – Validated. Only Validated violations are uploaded to SDWIS/FED.**
- *17. **Date – Enter same date as Determination Date.**
- *18. **ORIGINATING VIOLATION – Mandatory for Type 75 – Public Notice Rule Linked to a Violation. Click the ORIGINATING VIOLATION button to open the PN Violation Association List. Click the ASSOCIATE VIOLATION button to open the Violation Maintenance List. Highlight the original violation, then select Edit-Select from the menu bar. The selected violation should now appear in the “Originating Violations” section of the PN Violation Association List. Click OK to return to the Violation Maintenance screen for the type 75 violation.**

Warning: Do not press the “OK” button until you have associated enforcement actions.

REQUIRED STEPS!!!!

You can enter enforcement actions individually or have a group of enforcement actions added by selecting a standard response. Follow the instructions on the following page for the method you choose to use.

NOTE: All violations except TCR (violation types 21 – 26) must eventually end with an SOX (return to compliance) enforcement action. Waterworks which are SNC's based on TCR violations must also end with an SOX enforcement action.

All violations (determination date) entered, modified or deleted outside the current federal fiscal year must be reported to the Field Office TSE and coordinated with the Central Office SDWIS Administrator.

Continue to the next page.

Method I: Standard Response

This is the preferred method for associating enforcement actions because required enforcement actions and Public Notice delivery methods are automatically created based on the selected standard response thereby reducing data entry time and effort.

Press “Standard Response” button (hot key alt-R). Highlight the desired standard response from the pick list and click the “Select” button.

Click the “OK” button (hot key Alt-O) to save and close the violation.

Note: The associated enforcement actions will not display until you perform this step. If you want to view the enforcement actions after they have been created, go back into the violation record after you have saved it and click the Enforcement Actions button (Hot key Alt-E).

Standard Response	Associated Enforcement Actions	PN Method of Delivery
ODW SFJ (no PN)	SFJ	N/A
ODW TIER 1 SFJ/SIE	SIE, SFJ	Electronic Media
ODW TIER 1 SFJ/SIE/BOIL	SIE, SFJ, SFH	Electronic Media
ODW TIER 2 SFJ/SIE	SIE, SFJ	Mail
ODW TIER 2 SIE/SFJ/BOIL	SIE, SFJ, SFH	Mail
ODW COMMUNITY TIER 3 SFJ/SIE	SIE, SFJ	CCR Comment
ODW COMMUNITY TIER 3 SFJ/SIE/BOIL	SIE, SFJ, SFH	CCR Comment
ODW NC TIER 3 SFJ/SIE	SIE, SFJ	Posting

Method II: Individual Enforcement Action

If you use this method to individually add an SIE enforcement action, you must also manually add PN delivery methods as required.

Press “Enforcement Actions” button (hot key Alt-E).

Do NOT click the “OK” button at this time. This is done in the final step later in this procedure.

Next, Press the “Associate Enforcement Actions” button which displays a list of all enforcement actions previously created for the current waterworks.

Continue to the next page for instructions on adding enforcement actions.

ADDING ENFORCEMENT ACTIONS

From the Enforcement Action Maintenance List Screen, select "Edit" then "Add" from the menu drop down list. This displays the Enforcement Action Maintenance – Add Screen.

- *1. Action Type – Enter or select from pick list**
Name is automatically filled
- 2. State Asgn ID No – Not required.
- *3. Regulating Agency – Always use default of Virginia Dept of Health.**
- *4. Status – Use default of action "Taken"**
- 5. Compliance Officer – Name of the District Engineer (Last name, First name) use pick list for help in select exact name.
- *6. Status Date – Date of the NOV letter.**
- 7. Comments – Not required.
- *8. SDWIS/FED Data Origin – Use default of "State".**

REQUIRED STEPS!!!!

Once above data element requirements are entered, Press the "OK" button. This returns the user back to the Enforcement Action Maintenance List Screen.

Repeat the above procedure for any other Enforcement Actions. Be certain to add enforcement actions for a specific violation and monitoring period.

PROCEDURE FOR ASSIGNING ENFORCEMENT ACTIONS TO VIOLATIONS

From the *Enforcement Action Maintenance List* Screen:

Highlight all newly created enforcement actions to associate with the active violation.

Choose "Edit" then "Select" from the drop down menu.

The selected actions should appear under the "Enforcement Actions" section of the active violation.

If all the data appears correct, click "OK" which saves and closes the *Violation Enforcement Actions Assignment List*.

And then click "OK" which saves the violation and closes the *Violation Maintenance Add/Change Screen*.

IV. ENFORCEMENT MODULE

In order to have access to the "Enforcement" module, you must have compliance rights issued by the SDWIS administrator. Contact your TSE or Computer Information Systems Team (CIST) representative to insure that you have the proper SDWIS rights. You can access enforcement actions through the Enforcement Module or through the Monitoring and Non-Compliance Module (individual violation data).

MODIFYING ENFORCEMENT ACTIONS

See Page 43 for instructions on enforcement action data entry.

Public Notification Rule Data

The Public Notification_Rule data requirements are:

1. Completion date
2. Receipt date of the signed certification form
3. Manner of distribution
4. Closure by the association of an SIF enforcement action

From the Enforcement Action Maintenance List, select the appropriate SIE action and open the Enforcement Action Maintenance – Change screen.

Click the "Schedule" button. From the PN Schedule Activities box, highlight the PN Schedule activity and click "Change".

***1. Name - Delivery method. Select another delivery method from the pick list if the displayed default is not correct.**

***2. PN Required Date - Deadline for performing public notification. The default date is generated by the standard response selected and should not be modified.**

***3. PN Performed Date - Date public notification was completed.**

***4. Proof of PN Due Date - Deadline for receipt at ODW field office of the signed certification form. The default date is generated by the standard response selected and should not be modified.**

***5. Proof of PN Received Date - Date the signed certification form was received by ODW.**

6. Responsible Party - not required

Click "OK"

An advisory window will appear asking if an SIF enforcement action should be created. If you want to create an SIF, enter "SIF" in the Action Type box and then click "YES". You will be prompted to add an SIF action every time you edit the associated SIE PN data, therefore, be cautious not to create duplicate SIF enforcement actions.

DELETING ENFORCEMENT ACTIONS

From the Enforcement Module, select "Edit" then "Enforcement Actions" then "Maintain" from the menu drop down list. This displays the Enforcement Action Search Screen.

Enter the waterworks number (PWSID).

Click the Search Button.

From Enforcement Action Maintenance List, highlight desired enforcement action to delete.

Select "Edit" then "Delete" from the menu drop down list.

Click YES to the confirmation window.

If the action is linked to a violation you will receive a second confirmation window informing you of such. Click YES to delete the enforcement action. Please note that violations can not be deleted until all associated enforcement actions are deleted.

V. SAMPLING

ADDING 90TH PERCENTILE RESULTS

From the Sampling Module, select "Edit" then "Add Sample Summary". This displays the Specify Sample Summary Type screen.

Select "Lead and Copper - PbCu" from the pick list and press OK.

PbCu Sample Summary Maintenance – Add

Note the "Compliance Sample" check box at the top defaults to checked. This should remain checked if you are entering valid 90th percentile results.

- *1. Water System:** Enter the System ID number ("VA"+ PWSID No.) or select from pick list
Name is automatically filled.
- *2. WSF State Asgn ID:** Select the Active Distribution System (DS) Facility from the selection list.
- *3. Monitoring Period Start Date*** – Select appropriate date range from the pick list.
- 4. Duration** – Autofilled by step 3 above.
- *5. Sample Collection:**
Begin Date – Earliest date of sample set End Date – Last date of sample set
- *6. Date Summary Received** – Date Field Office received sample summary.
- *7. Pb90 and Cu90 – Number of Samples:** Enter appropriate number for each contaminant.
- *8. Pb90 and Cu90 –90th Percentile Level:** Enter appropriate level for lead and for copper, enter only exceedances. If the 90th percentile is less than the method detection limit, then enter 0.001 mg/l for Pb.
- *9. Data Quality** – Use default value of "Accepted".
- *10. SDWIS/FED** – Do not touch!!! This field is maintained by the SDWIS Administrator.

11. Lab State ID No. – Not Required.
12. Lab Federal ID No. – Not Required.
13. Laboratory Name – Not Required.

Press “Add New Summary” button and repeat the steps to add a new summary or “OK” to save the current record and exit.

ADDING CHEMICAL/PHYSICAL RESULTS

Before results can be entered, sampling points must be created on a facility (see Page 28).

From the Sampling Module, select "Edit" then "Add Sample" then "By Water System". Enter Water system. This displays the Sample Category Selection screen.

For physical contaminants (TOC and Alkalinity), click the "Physical Parameters" button.

For chemical contaminants (TTHM, HAA5, FLUO) click the "Chemical" button.

Select the appropriate analyte group by clicking the >> button (for TOC and Alkalinity, select DBP), or check the "No Analyte Group" box to enter an individual analyte.

- *1. Sample for compliance purposes – System defaults to checked for "yes". This box must be checked 'yes'. However, there is an exception to this direction. The exception is when a sample analysis is voided. Uncheck the 'yes' box for a voided result so the sample will not be counted in any automated compliance determinations. Our policy is not to delete any analysis results from the database but appropriately flag the results. The reason for voiding results must be documented in the comments box.**
- 2. Analyte Group – defaults from selection on previous screen. Do not modify.
- *3. Lab Sample No. – Sample number provided by the lab.**
Note: A raw water TOC sample should have a paired alkalinity result. For this pairing type, always enter only the TOC lab sample number and ignore a sample number for the alkalinity analysis. See note ¹ below for a further explanation of logging multiple analyses of different parameters in an analyte group.
- 4. State Sample No. – **Do not use. This field is reserved for the DCLS specific service number on results imported via EDI.**
- *5. Collection Date – Date sample was collected.**
- *6. Collection Time – Time sample was collected.**
- *7. Type – Normal selection is 'RT' for 'Routine'. However, a routine sample which mandates collection of a confirmation sample due to an exceedance of a maximum contaminant level or detection of an organic chemical means that the subsequent sample result will be listed as a 'confirmation' type sample in this field.**
- 8. Replacement - Not required.
- *9. Date Lab Rcpt – Date sample was received at the lab.**
- *10. Sampling Point – Select from pick list by clicking >> button. If the sampling point does not appear on the list, add it through the facilities maintenance screen (see Page 28) . (WSF State Asgn ID will auto fill).**
- 11. Sample Location – defaults to the location described for the Sampling Point. Do not modify.

¹ NOTE: For example, the physical contaminant DBP Analyte Group produces two results screens. One will log TOC concentration and the second will log the alkalinity. Look in the screen window top blue box to note which analyte results are to be logged. Usually the first analyte will be TOC. After entering the first analyte data and clicking 'ok', the second screen will appear for alkalinity. Finished water TOC samples are not paired with an alkalinity result, so click the 'skip' button to store data and end the procedure.

***12. State ID No. – VA Laboratory Identification Number.** Select from the list by clicking the >> button. If the laboratory does not exist, contact your office SDWIS administrator.

13. Name – Defaults based on State ID No. Do not modify.

14. Federal ID No. - Not required.

15. Collector Name - Not required.

16. Rejection Reason - Not required.

17. Pb/Cu Type - Not required.

Click the Results button to complete the record.

Note: Analytes will appear in sequence. If results do not exist for the displayed analyte, press the “SKIP” button on the bottom of the results screen to continue to the next analyte.

Note: The result data entry screen varies for the sample type selected, please refer to the following appropriate section:

Physical Parameter Results

***1. Concentration – Enter the analysis results and select units from the pick list.**

***2. Method Code – Always leave blank!**

3. Complete Date – Not Required.

4. State Notification Date – Not Required.

5. Complete Time – Not Required.

6. Water System Notification Date – Not Required.

***7. Data Quality – Accept the default of “Accepted”. If a sample has created a schedule record in R&R and is then rejected in SDWIS, values of the schedule record will be changed as follows: Last sample date is set to null, Next sample date is set to the current date (refresh date), the sample ID is set to null, and the text “Sample ID was rejected” is entered in the comments field.**

8. Data Quality Reason – Not Required.

Click “OK” – to save the record and to continue to the next analyte in the group. When you have confirmed the LAST analyte in the group, choose “File” from the menu bar and then “Exit” to return to the Sample Maintenance By Water System - Add screen. Click OK here and you will see the Sample Maintenance List by Water System screen. Then select “File” then “Exit” from the menu bar.

Chemical Results

You must report by EITHER Reporting Level Type OR Concentration. Use the Reporting Level Type when entering a nondetectable analysis result such as "<1 ppb".

Reporting Level Type (a nondetectable result such as <1 ppb, is broken into three pieces of information as listed below in 1, 2 and 3.):

- *1. Less Than – click box to “check”**
- *2. Reporting Level Type – Select “Lab Reporting Level”**
- *3. Level – Enter the value portion of the nondetectable result. For example, “1” if < 1 ppb OR “0.001” if < 0.001 ppb. Next select the appropriate unit from the pick list.**

If using Concentration:

- *1. Concentration – Enter the analysis results.**
- *2. Select units from the pick list**
- *3. Method Code – Always leave blank!**
- 4. Complete Date – Not Required
- 5. State Notification Date – Not Required
- 6. Complete Time – Not Required
- 7. Water System Notification Date – Not Required
- *8. Data Quality – Accept the default of “Accepted”. If a sample has created a schedule record in R&R and is then rejected in SDWIS, values of the schedule record will be changed as follows: Last sample date is set to null, Next sample date is set to the current date (refresh date), the sample ID is set to null, and the text “Sample ID was rejected” is entered in the comments field.**
- 9. Data Quality Reason – Not Required

Click “OK” – to save the record and to continue to the next analyte in the group. When you have confirmed the LAST analyte in the group, choose “File” from the menu bar and then “Exit” to return to the Sample Maintenance By Water System - Add screen. Click OK here and you will see the Sample Maintenance List by Water System screen. Then select “File” then “Exit” from the menu bar.

APPENDIX A

LOCALITY CODES – COUNTIES

<u>Code</u>	<u>County Name</u>	<u>Code</u>	<u>County Name</u>	<u>Code</u>	<u>County Name</u>
001	Accomac	067	Franklin County	135	Nottoway
003	Albemarle	069	Frederick	137	Orange
005	Alleghany	071	Giles	139	Page
007	Amelia	073	Gloucester	141	Patrick
009	Amherst	075	Goochland	143	Pittsylvania
011	Appomattox	077	Grayson	145	Powhatan
013	Arlington	079	Greene	147	Prince Edward
015	Augusta	081	Greensville	149	Prince George
017	Bath	083	Halifax	153	Prince William
019	Bedford County	085	Hanover	155	Pulaski
021	Bland	087	Henrico	157	Rappahannock
023	Botetourt	089	Henry	159	Richmond County
025	Brunswick	091	Highland	161	Roanoke County
027	Buchanan	093	Isle of Wight	163	Rockbridge
029	Buckingham	095	James City	165	Rockingham
031	Campbell	097	King and Queen	167	Russell
033	Caroline	099	King George	169	Scott
035	Carroll	101	King William	171	Shenandoah
036	Charles City	103	Lancaster	173	Smyth
037	Charlotte	105	Lee	175	Southampton
041	Chesterfield	107	Loudoun	177	Spotsylvania
043	Clarke	109	Louisa	179	Stafford
045	Craig	111	Lunenburg	181	Surry
047	Culpeper	113	Madison	183	Sussex
049	Cumberland	115	Mathews	185	Tazewell
051	Dickenson	117	Mecklenburg	187	Warren
053	Dinwiddie	119	Middlesex	191	Washington
057	Essex	121	Montgomery	193	Westmoreland
059	Fairfax County	125	Nelson	195	Wise
061	Fauquier	127	New Kent	197	Wythe
063	Floyd	131	Northampton	199	York
065	Fluvanna	133	Northumberland		

LOCALITY CODES - INDEPENDENT CITIES

<u>Code</u>	<u>City Name</u>	<u>Code</u>	<u>City Name</u>	<u>Code</u>	<u>City Name</u>
510	Alexandria	630	Fredericksburg	730	Petersburg
515	Bedford City	640	Galax	740	Portsmouth
520	Bristol	650	Hampton	750	Radford
530	Buena Vista City	660	Harrisonburg	760	Richmond City
540	Charlottesville	670	Hopewell	770	Roanoke City
550	Chesapeake	678	Lexington	775	Salem
560	Clifton Forge	680	Lynchburg	780	South Boston
570	Colonial Heights	685	Manassas	790	Staunton
580	Covington	687	Manassas Park	800	Suffolk
590	Danville	690	Martinsville	810	Virginia Beach
595	Emporia	700	Newport News	820	Waynesboro
600	Fairfax City	710	Norfolk	830	Williamsburg
610	Falls Church	720	Norton	840	Winchester
620	Franklin City	725	Poquoson		

ADMINISTRATIVE STATE REGIONS

<u>Code</u>	<u>Region</u>
1	Abingdon
2	Lexington
3	Virginia Beach
4	Richmond
5	Danville
6	Culpeper

ADMINISTRATIVE STATE DISTRICTS

<u>Code</u>	<u>Description</u>	<u>Region Assigned</u>
1	District 1	Abingdon
2	District 2	Abingdon
3	District 3	Abingdon
4	District 4	Abingdon
5	District 5	Lexington
6	District 6	Lexington
7	District 7	Lexington
8	District 8	Culpeper
9	District 9	Culpeper
10	District 10	Lexington
11	District 11	Danville
12A	District 12A	Danville
12B	District 12B	Danville
13	District 13	Danville
14	District 14	Danville
15A	District 15A	Richmond
15B	District 15B	Richmond
16	District 16	Culpeper
17	District 17	Richmond
18	District 18	Richmond
19	District 19	Virginia Beach
20A	District 20A	Virginia Beach
20B	District 20B	Virginia Beach
21	District 21	Virginia Beach
22	District 22	Virginia Beach

APPENDIX B

March 22, 2001

Page 20 - Treatment Plant Facility – Sampling Point Information changed to Conditionally Mandatory.
Page 24 - All Other Facilities Basic Information – modified content of paragraph below #6
Page 28 - Added new content above #1.
Further clarified #1.
#3 – no longer mandatory
#4 – no longer mandatory and should be blank
Page 30 - Added Facility Flows Information
Page 48 - Added instructions for entering Chemical/Physical results
Page 49 - Continued instructions for entering Physical results
Page 50 - Continued instructions for entering Chemical results
Page 53 - Added Appendix B - User's Guide Revision History

May 1, 2001

Page 28 – Bullet #4 – Source Water Type is mandatory.
Page 30 – Further clarified instructions for establishing Facility Flows
Page 37 – Modified instructions for Violation Determination Date
Page 50 – Corrected typo in bullet #3 – Level

July 12, 2001

Page 28 – Adds instructions for hydraulically isolated distribution systems regarding D/DBP sampling points
Page 48 – Bullet #1 – mandates 'checking' the "compliance" box for samples type.
Page 48 – Bullet #7 – directions for voiding sample analysis results

December 18, 2001

All Pages updated header to current SDWIS version 7.0 and rev. date
Page 6 Inventory Basic Information. Added instructions for Grandfathered systems in Alternate State Field.
Page 7 Inventory Basic Information: Modified explanation of Operating Category.
Page 7 Inventory Basic Information: Avg. Daily Production in GPD is not required. Total Design Cap. In GPD is mandatory and further defined for grandfathered systems.
Page 8 New primary source code selection hierarchy in SDWIS 7.0.
Page 19 Treatment Plant Facility: New field for driving Directions added to SDWIS 7.0.
Page 21 Well Facility: New field for driving Directions added to SDWIS 7.0.
Page 22 Well Detail information is mandatory for new wells, only.
Page 23 Well Screens and Casing information is mandatory for new wells, only.
Page 24 Other Facilities: Further clarified facility naming convention.
Page 25 Other Facilities: New field for driving Directions added to SDWIS 7.0.
Page 27 Locational Information: Added descriptions for "Source" and "Verification" fields. Removed note regarding SDWIS bug in version 6.1 that has been corrected in version 7.0.
Page 28 Sampling Point Information: #1 Paragraph 3. Further defined D/DBP rule instructions.
Page 28 Sampling Point Information: Bullet #2 – Added warning note not to change sample point location after R&R forms have been printed.
Page 28 Sampling Point Information: Bullet #3 – Sampling Point Type is mandatory.
Page 28 Sampling Point Information: Added description of new fields "Notes 1, 2 and 3" added to SDWIS 7.0.
Page 32 Legal Entities: Added description of new field "Collector" added to SDWIS 7.0.
Page 35 Legal Entity Guidelines: SDWIS is less stringent about duplicate records now.
Page 36 New instructions for Milestone entry.
Page 38 Violations: SDWIS 7.0 has added the ability to link a violation to an individual sampling point within the water system. Instructions for this field are that user's should NOT use it as it may cause problems with the SNC list.
Page 46 PbCu Sample Summary: Water System Facility Selection is mandatory.

February 4, 2002

All Pages	updated header rev. date
Page 6	Inventory Basic Information. Added instructions for consecutive waterworks in Alternate State Field.
Page 7	Inventory Basic Information: Further defined instructions for Total Design Cap. where a consecutive waterworks design cap. is based on another waterworks.
Page 37	Further clarified that analyte groups are normally used for FTS violations. Added reference to Appendix C.
Page 48	Adding Chemical/Physical Results: Made #6. Collection time and #9 Lab Receipt Date mandatory.
Appendix C	List of current SDWIS Analyte Groups

May 22, 2002

All Pages	updated header rev. date
Page 6	Changed DWSE to DDW
Page 8	Instructions for deleting a PWS replaced with instructions for waterworks with revoked permits
Page 37	Adding Violations - Added reference to Appendix D.
Page 38	Separated and listed violation types (SDWA and VAC). Notation regarding SOX enforcement actions. Notation regarding entering violation and enforcement actions outside of the current federal fiscal year.
Appendix D	Minimum Reporting Requirements for violation data entry

November 8, 2002

All Pages	updated header rev. date
Where applicable	– Changed OWP to DDW
Page 4	Added waterworks classification instructions
Page 9	Added warning about NP classification
Page 11	Added warning about NP classification
Page 13	Added instruction to add VA Administrative District to the regulating agency list. Added warning about NP classification
Page 21	Warning not to delete the main source of a PWS. Added warning about NP classification
Page 24	Moved COMPL note to more visible location.
Page 25	Warning not to delete the main source of a PWS. # 15 – Seller Treatment is mandatory for consecutive connection facilities Added warning about NP classification
Page 37	Added reference to Appendix E for Violation Data Entry Guidelines for RAA PMCL
Page 38	Violations: Added, Changed, Removed MCL Violation types
Page 42	Enforcement Actions: Added instructions for using standard response enforcement action groups. Added hot-key use instructions for buttons that may not display on non 1024x728 resolution screens
Page 46	Sample Summaries: Item #10 – limits field to use by SDWIS Administrator.
Appendix E	Violation Data Entry Guidelines for Running Annual Average PMCL

January 7, 2003

All Pages	updated header rev. date and SDWIS 8.0 version number
Page 3	Added note about desktop area viewing size and use of hot keys for screens that were enlarged in version 8.0.
Page 4	Added hot key to close TCR Sample Schedule Modification screen
Page 5	New definition of how SDWIS determines Primary Source Code
Page 8	Moved explanation of how SDWIS determines Primary Source Code to Page 5
Page 9	Added hot key to close TCR Sample Schedule Modification screen
Page 11	Added hot key to close TCR Sample Schedule Modification screen
Page 13	Added hot key to close TCR Sample Schedule Modification screen
Page 20	Added description of new 8.0 button "Microbial Removal"
Page 21	Added hot key to close TCR Sample Schedule Modification screen
Page 25	Added hot key to close TCR Sample Schedule Modification screen
Page 32	Legal Entity added new 8.0 fields: country, international postal code
Page 37	Violations: Added instructions for the federal fiscal year field. Data Entry Hint new note (d) explaining OK and Cancel hot keys
Page 38	Added new columns to violation types tables to indicate use of compliance or violation period.
Page 40	Violations: New 8.0 field: Violation Period is mutually exclusive with compliance period Added VP column to VAC type violations Violations: New 8.0 fields: Violation Package Number, Report to SDWIS FED
Page 42	Added hot-key use instructions for buttons that may not display on non 1024x728 resolution screens
Page 49	Added notation about R&R Scheduler and rejected samples.
Page 50	Added notation about R&R Scheduler and rejected samples.
Page 60	Appendix D – Changed violation data entry instructions to use new violation period range where applicable and compliance period range otherwise. Added instructions for SWTR, Lead and Copper and CCR rules.

January 22, 2003

All Pages	update header rev. date
Page 40	Violations: Added description of new 8.0 field "Tier Level"
Page 42	Added additional standard responses and Public Notice Delivery Methods
Page 43	Enforcements: Removed mandatory requirement for selection of a Compliance Officer (#5).
Page 44	Added instructions for utilizing the Public Notification Schedule
Page 47	SDWIS 8.0 does not prompt for milestone creation after data entry of 90 th percentile results. The 7.0 instruction for this was removed.

April 29, 2003

All Pages	updated header rev. date. Replaced all occurrences of DDW with ODW.
Page 12	Points of Contact – Further defined a Designated Op in Charge as one who must be licensed. Further defined that operators may or may not be licensed.
Page 15	Added instructions for mandatory requirement of establishing a seller to purchaser flow for water purchases.
Page 38	Modified Violation list to reflect changes in 8.0
Page 40	Added VAC Violation type B2
Page 41	Violations: #18 – Added instructions for associating an originating violation to a type 75 violation.
Page 42	Changed delivery method of Tier 2 Standard Responses from "Newspaper" to "Mail". Modified/added other standard responses.
Page 48	Sampling – Reserved use of State Sample Number field for DCLS method service number
Appendix C	Removed the Analyte Groups deleted from SDWIS: ALK, CYAN, DIQUAT, FLORUIDE, NITRITE, NITRATE
Appendix D	Modified Violation instructions to reflect changes in 8.0.

APPENDIX C

Group Code	Group Name	Analyte Name	Analyte Code
S125	CARBAMATES (SOC)-	CARBOFURAN	2046
S125	CARBAMATES (SOC)-	OXAMYL (VYDATE)	2036
S113	CHLR ACID	2,4,5-TP (SILVEX)	2110
S113	CHLR ACID	2,4-D	2105
S113	CHLR ACID	DALAPON	2031
S113	CHLR ACID	DINOSEB	2041
S113	CHLR ACID	PENTACHLOROPHENOL	2326
S113	CHLR ACID	PICLORAM	2040
DBP	D/DBP	ALKALINITY, TOTAL	1927
DBP	D/DBP	CARBON, TOTAL ORGANIC (TOC)	2920
IOCA	INORGANICS	CHLORIDE	1017
IOCA	INORGANICS	COLOR	1905
IOCA	INORGANICS	CORROSIVITY	1910
IOCA	INORGANICS	FLUORIDE	1025
IOCA	INORGANICS	ODOR	1920
IOCA	INORGANICS	SOLIDS, TOTAL DISSOLVED (TDS)	1930
IOCA	INORGANICS	SULFATE	1055
PBCU	LEAD AND COPPER	COPPER	1022
PBCU	LEAD AND COPPER	LEAD	1030

Group Code	Group Name	Analyte Name	Analyte Code
META	METALS	ANTIMONY	1074
META	METALS	ARSENIC	1005
META	METALS	BARIUM	1010
META	METALS	BERYLLIUM	1075
META	METALS	CADMIUM	1015
META	METALS	CHROMIUM	1020
META	METALS	COPPER	1022
META	METALS	IRON	1028
META	METALS	MANGANESE	1032
META	METALS	MERCURY	1035
META	METALS	NICKEL	1036
META	METALS	SELENIUM	1045
META	METALS	SODIUM	1052
META	METALS	THALLIUM	1085
META	METALS	ZINC	1095
RADA	RAD ALPHA	GROSS ALPHA, EXCLUDING RA & U	4000
RADA	RAD ALPHA	RADIUM, COMBINED (226, 228)	4010
RADA	RAD ALPHA	URANIUM, COMBINED	4006
S009	SEMIVOL(SOC)-A	ALACHLOR (LASSO)	2051
S009	SEMIVOL(SOC)-A	ALDRIN	2356
S009	SEMIVOL(SOC)-A	ATRAZINE	2050
S009	SEMIVOL(SOC)-A	CHLORDANE	2959
S009	SEMIVOL(SOC)-A	ENDRIN	2005
S009	SEMIVOL(SOC)-A	HEPTACHLOR	2065
S009	SEMIVOL(SOC)-A	HEPTACHLOR EPOXIDE	2067
S009	SEMIVOL(SOC)-A	HEXACHLOROBENZENE	2274
S009	SEMIVOL(SOC)-A	HEXACHLOROCYCLOPENTADIENE	2042
S009	SEMIVOL(SOC)-A	METHOXYCHLOR	2015
S009	SEMIVOL(SOC)-A	POLYCHLORINATED BIPHENYLS	2383
S009	SEMIVOL(SOC)-A	SIMAZINE	2037
S009	SEMIVOL(SOC)-A	TOXAPHENE	2020
S121	SEMIVOL(SOC)-B	BENZO (A) PYRENE	2306
S121	SEMIVOL(SOC)-B	DI(2-ETHYLHEXYL) - ADIPATE	2035
S121	SEMIVOL(SOC)-B	DI(2-ETHYLHEXYL) - PHTHALATE	2039
HAA5	TOTAL HALOACETIC	TOTAL HALOACETIC ACIDS (HAA5)	2456

Group Code	Group Name	Analyte Name	Analyte Code
TTHM	TOTAL	BROMODICHLOROMETHANE	2943
TTHM	TOTAL	BROMOFORM	2942
TTHM	TOTAL	CHLORODIBROMOMETHANE	2944
TTHM	TOTAL	CHLOROFORM	2941
TTHM	TOTAL	TOTAL TRIHALOMETHANES (TTHM)	2950
VOC	VOC	1,1,1-TRICHLOROETHANE	2981
VOC	VOC	1,1,2-TRICHLOROETHANE	2985
VOC	VOC	1,1-DICHLOROETHYLENE	2977
VOC	VOC	1,2,4-TRICHLOROBENZENE	2378
VOC	VOC	1,2-DICHLOROETHANE	2980
VOC	VOC	1,2-DICHLOROPROPANE	2983
VOC	VOC	BENZENE	2990
VOC	VOC	CARBON TETRACHLORIDE	2982
VOC	VOC	CIS-1,2-DICHLOROETHYLENE	2380
VOC	VOC	DICHLOROMETHANE	2964
VOC	VOC	ETHYLBENZENE	2992
VOC	VOC	MONOCHLOROBENZENE	2989
VOC	VOC	O-DICHLOROBENZENE	2968
VOC	VOC	P-DICHLOROBENZENE	2969
VOC	VOC	STYRENE	2996
VOC	VOC	TETRACHLOROETHYLENE	2987
VOC	VOC	TOLUENE	2991
VOC	VOC	TRANS-1,2-DICHLOROETHYLENE	2979
VOC	VOC	TRICHLOROETHYLENE	2984
VOC	VOC	VINYL CHLORIDE	2976
VOC	VOC	XYLENES	2955
S001	VOLFUM(SOC)-A	DIBROMOCHLOROPROPANE (DBCP)	2931
S001	VOLFUM(SOC)-A	ETHYLENE DIBROMIDE (EDB)	2946

The following groups have been retired and should NOT be used

NO 2	Z NO USE IOCM	ANTIMONY	1074
NO 2	Z NO USE IOCM	ARSENIC	1005
NO 2	Z NO USE IOCM	BARIUM	1010
NO 2	Z NO USE IOCM	BERYLLIUM	1075
NO 2	Z NO USE IOCM	CADMIUM	1015
NO 2	Z NO USE IOCM	CHROMIUM	1020
NO 2	Z NO USE IOCM	FLUORIDE	1025
NO 2	Z NO USE IOCM	MERCURY	1035
NO 2	Z NO USE IOCM	NICKEL	1036
NO 2	Z NO USE IOCM	SELENIUM	1045
NO 2	Z NO USE IOCM	THALLIUM	1085

Group Code	Group Name	Analyte Name	Analyte Code
The following groups have been retired and should NOT be used			
NO 3	Z NO USE RAD < 2001	GROSS ALPHA, EXCLUDING RA & U	4000
NO 3	Z NO USE RAD < 2001	RADIUM, COMBINED (226, 228)	4010
NO 1	Z NO USE VOC	1,1,1-TRICHLOROETHANE	2981
NO 1	Z NO USE VOC	1,1,2-TRICHLOROETHANE	2985
NO 1	Z NO USE VOC	1,1-DICHLOROETHYLENE	2977
NO 1	Z NO USE VOC	1,2,4-TRIMETHYLBENZENE	2418
NO 1	Z NO USE VOC	1,2-DICHLOROETHANE	2980
NO 1	Z NO USE VOC	1,2-DICHLOROPROPANE	2983
NO 1	Z NO USE VOC	BENZENE	2990
NO 1	Z NO USE VOC	CARBON TETRACHLORIDE	2982
NO 1	Z NO USE VOC	CIS-1,2-DICHLOROETHYLENE	2380
NO 1	Z NO USE VOC	DICHLOROMETHANE	2964
NO 1	Z NO USE VOC	ETHYLBENZENE	2992
NO 1	Z NO USE VOC	MONOCHLOROBENZENE	2989
NO 1	Z NO USE VOC	O-DICHLOROBENZENE	2968
NO 1	Z NO USE VOC	P-DICHLOROBENZENE	2969
NO 1	Z NO USE VOC	STYRENE	2996
NO 1	Z NO USE VOC	TETRACHLOROETHYLENE	2987
NO 1	Z NO USE VOC	TOLUENE	2991
NO 1	Z NO USE VOC	TRANS-1,2-DICHLOROETHYLENE	2979
NO 1	Z NO USE VOC	TRICHLOROETHYLENE	2984
NO 1	Z NO USE VOC	VINYL CHLORIDE	2976
NO 1	Z NO USE VOC	XYLENES	2955
NO 4	Z NO USE NITRATE	NITRATE (AS N)	1040

APPENDIX D

The following tables will provide Minimum Reporting Requirements for violation data entry. It will also provide guidelines for the violation compliance period (CP) or violation (VP) period.

D/DBP Rule: Determination Date = Status Date = NOV Date. For MCL violations, you must enter the calculated average in the analysis result field.

Violation		
Type	Description	Analyte Code
02 – MCL, Average, with No. Exceedance	Monthly Average Chlorite MCL Exceeded	1009 - Chlorite
02 – MCL, Average, without No. Exceedance	Running Annual Average HAA5 MCL Exceeded	2456 – HAA5
	Running Annual Average TTHM MCL Exceeded	2950 – TTHM
	Running Annual Average Chloramine MRDL Exceeded	1006 – Chloramine residual
11 – Max. Res. Disinfectant Lvl (MRDL)	Running Annual Average Chlorine MRDL Exceeded	0999 – Chlorine residual
	Failure to collect and report distribution Chlorine Dioxide Residual samples on the day following an entry point MRDL exceedance.	1008 – Chlorine Dioxide Residual
11 – Max Res Disinfect Lvl (MRDL) Non Monitoring	Any two consecutive daily entry point Chlorine Dioxide Residual samples exceeding 0.8 mg/L and all distribution Chlorine Dioxide Residual samples less than 0.8 mg/L.	1008 – Chlorine Dioxide Residual
12 – Qualified Operator Failure	Waterworks that add disinfectant/chemical oxidant lacks a licensed operator in responsible charge. (Other waterworks – use state violation type B2)	0400 – D/DBP Rule
B2 – LACKS LICENSED OIRC-NO DISF/CHEM OX ADD	Waterworks that do NOT add disinfectant/chemical oxidant lacks a licensed operator in responsible charge. (Other waterworks – use state violation type 12)	0400 – D/DBP Rule

*Do NOT enter compliance period dates into SDWIS.

A SOX enforcement action **MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period
VP – Violation Period

Violation			
Type	Description	Analyte Code	Period
27 – Failure to have monitoring plan.	Failure to submit a copy of the monitoring plan to the state.	0400 – D/DBP Rule	VP BEGIN DATE: Large waterworks – January 31, 2002; small waterworks January 31, 2004, when ODW staff determines waterworks lacks a monitoring plan.* VP END DATE: Open until returned to compliance, then SOX status date.**
27 – Monitoring, (DBP) with No. Missing Samp	Failure to collect 100% of required chlorine dioxide samples.	1008 – Chlorine Dioxide Residual	CP BEGIN DATE: First day of month DURATION: MN = Month
27 – Monitoring, Routine (DBP), MAJOR	Failure to collect 100% of required Bromate samples.	1011 - Bromate	CP BEGIN DATE: First day of the most recent calendar quarter of the RAA. DURATION: QT = Quarter
	Failure to collect 100% of required Bromide samples.	1004 – Bromide	CP BEGIN DATE: First day of the most recent calendar quarter of the RAA. DURATION: QT = Quarter
	Failure to collect source and finished water TOC samples and alkalinity sample.	2920 – Carbon, Total Organic (TOC)	CP BEGIN DATE: First day of the Month DURATION: MN = Month
27 – Monitoring, Routine (DBP), Major OR Minor	MAJOR: Failure to collect 90% of daily Chlorite samples at the entrance to the distribution system or any required three-set chlorite sample in the distribution system. MINOR: Collecting 90-99% of daily chlorite samples.	1009 - Chlorite	CP BEGIN DATE: First day of month DURATION: MN = Month
	MAJOR: Failure to collect at least 90% of Chloramine samples. MINOR: Collecting 90-99% of Chloramine samples.	1006 – Chloramine residual	CP BEGIN DATE: First day of the most recent calendar quarter of the RAA. DURATION: QT = Quarter
	MAJOR: Failure to collect at least 90% of Chlorine samples. MINOR: Collecting 90-99% of Chlorine samples.	0999 – Chlorine residual	CP BEGIN DATE: First day of the most recent calendar quarter of the RAA. DURATION: QT = Quarter
	MAJOR: Failure to collect at least 90% of required TTHM and HAA5 samples. MINOR: Collecting 90-99% of required TTHM and HAA5 samples.	2456 – HAA5 2950 – TTHM	CP BEGIN DATE: First day of the most recent calendar quarter of the RAA. DURATION: QT = Quarter
37 – Failure to	Failure to submit and obtain State approval of a	0400 – D/DBP Rule	VP BEGIN DATE: Day after compliance period end

*Do NOT enter compliance period dates into SDWIS.

**A SOX enforcement action MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period

VP – Violation Period

Violation			
Type	Description	Analyte Code	Period
Profile/Consult (IESWTR)	plan detailing significant treatment process modifications prior to making such modifications when waterworks failed to achieve TOC removal.		date.* VP END DATE: Open until returned to compliance, then SOX status date.**
46 – Inadequate DBP precursor (TOC) removal	Failure to maintain TOC reduction ratio greater than or equal to one for the running annual average.	2920 – Carbon, Total Organic (TOC)	CP BEGIN DATE: First day of the most recent calendar quarter of the RAA. DURATION: QT = Quarter

*Do NOT enter compliance period dates into SDWIS.

**A SOX enforcement action MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period
VP – Violation Period

IESWTR Rule: Determination Date = Status Date = NOV Date.

Violation			
Type	Description	Analyte Code	Period
9 – Record Keeping for Indi. Filter/FBR	Failure to maintain the results of individual filter monitoring for at least 3 years.	0300 – Interim Enhanced SWTR 0500 – Filter Backwash Rule	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
29 – Failure to produce filter assessment	<ul style="list-style-type: none"> - Failure to produce and/or report to State individual filter profile with 7 days of exceedance (>0.5 NTU in 2 consecutive measurements taken 15 minutes apart.) - Failure to produce and/or report to State individual filter profile with 7 days of exceedance (>1.0 NTU in 2 consecutive measurements taken 15 minutes apart.) - Failure to produce and/or report to State a self-assessment of an individual filter within 14 days of exceedance (>1.0 NTU in 2 consecutive measurements taken 15 minutes apart in each of 3 consecutive months.) 	0300 – Interim Enhanced SWTR	CP BEGIN DATE: First day of month DURATION: MN = Month
29 – Failure to produce CPE (IESWTR)	Failure to have a CPE conducted by State.	0300 – Interim Enhanced SWTR	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
37 – Failure to Profile/Consult (IESWTR)	Failure to consult with State before making a significant change to disinfection practice based on results of disinfection profile.	0300 – Interim Enhanced SWTR	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**

*Do NOT enter compliance period dates into SDWIS.

**A SOX enforcement action MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period

VP – Violation Period

Violation			
Type	Description	Analyte Code	Period
38 – Monitoring Routine (IESWTR), Major OR Minor	<p>MAJOR: Failure to collect at least 90% of required turbidity samples.</p> <p>MINOR: Failure to collect 90 – 99% of required turbidity samples.</p> <p>- Failure to report that the waterworks has conducted all individual filter monitoring to State within 10 days after the end of each month.</p> <p>- Failure to report that the waterworks has exceeded 1 NTU (or maximum set by State) in representative samples by end of next business day.</p>	0300 – Interim Enhanced SWTR	CP BEGIN DATE: First day of month DURATION: MN = Month
43 – Single Comb. Filter Effluent (IESWTR)	Failure to achieve CFE turbidity level <1 NTU if PWS uses conventional or direct filtration.	0300 – Interim Enhanced SWTR	CP BEGIN DATE: First day of month DURATION: MN = Month
44 – Monthly Comb. Filter Effluent (IESWTR)	Failure to achieve CFE turbidity level of 0.3 NTU in 95% of monthly measurements if PWS uses conventional or direct filtration.	0300 – Interim Enhanced SWTR	CP BEGIN DATE: First day of month DURATION: MN = Month
47 – Uncovered Storage Facility (IESWTR)	Waterworks are not allowed to begin construction of any uncovered finished water storage facility.	0300 – Interim Enhanced SWTR	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**

SWTR Rule: Determination Date = Status Date = NOV Date.

Violation			
Type	Description	Analyte Code	Period
42 – Failure to Filter (SWTR)	Failure to filter surface or groundwater under influence of surface water.	0200 – Surface Water Treatment Rule	VP BEGIN DATE: Compliance period begin date.* VP END DATE: Open until returned to compliance, then SOX status date.**

*Do NOT enter compliance period dates into SDWIS.

**A SOX enforcement action MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period

VP – Violation Period

Lead and Copper Rule: Determination Date = Status Date = NOV Date.

Violation			
Type	Description	Analyte Code	Period
51 – Initial Tap Sampling (PB/CU)	Failure to collect all lead and copper samples during either initial six month monitoring period.	5000 – Lead and Copper Rule	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
52 – Follow-Up or Routine Tap M/R (PB/CU)	System monitoring schedule is January – June Failure to collect all lead and copper samples in the first six month monitoring period after installation startup of corrosion control treatment.	5000 – Lead and Copper Rule	VP BEGIN DATE: 07/01/XXXX VP END DATE: Open until returned to compliance, then SOX status date.** <i>Note: XXXX = Calendar year the system was in violation</i>
	System monitoring schedule is July – December Failure to collect all lead and copper samples in the second six month monitoring period after installation startup of corrosion control treatment.	5000 – Lead and Copper Rule	VP BEGIN DATE: 01/01/YYYY VP END DATE: Open until returned to compliance, then SOX status date.** <i>Note YYYY = Next calendar year after the system was in violation</i>
	1 or 3 year monitoring schedule Failure to collect all lead and copper during routing monitoring period.	5000 – Lead and Copper Rule	VP BEGIN DATE: 10/01/YYYY VP END DATE: Open until returned to compliance, then SOX status date.** <i>Note: YYYY = Calendar year of the compliance period end date</i>
56 – Initial/Follow-Up/Routine SRC WTR M/R	Failure to conduct lead and copper source water monitoring when required.	5000 – Lead and Copper Rule	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
57 – OCCT/SOWT Recommendation/Study	Failure to perform corrosion control study after AL is exceeded.	5000 – Lead and Copper Rule	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
58 - OCCT/SOWT Installation Demonstration	Failure to install corrosion control treatment facilities.	5000 – Lead and Copper Rule	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**

*Do NOT enter compliance period dates into SDWIS.

**A SOX enforcement action MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period

VP – Violation Period

Violation			
Type	Description	Analyte Code	Period
63 - MPL Non-Compliance (PB/CU)	Failure to maintain State designated maximum permissible level for Lead (Copper) after source water treatment is installed.	1022 – Copper	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
	Failure to maintain State designated maximum permissible level for Lead (Copper) after source water treatment is installed.	1030 - Lead	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
64 – Lead Service Line Replacement (PB/CU)	Failure to replace lead service lines.	5000 – Lead and Copper Rule	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**
65 – Public Education (PB/CU)	Failure to perform public education.	5000 – Lead and Copper Rule	VP BEGIN DATE: Day after compliance period end date.* VP END DATE: Open until returned to compliance, then SOX status date.**

*Do NOT enter compliance period dates into SDWIS.

**A SOX enforcement action MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period

VP – Violation Period

CCR: Determination Date = Status Date = NOV Date.

Violation			
Type	Description	Analyte Code	Period
71 – CCR Report	Failure to issue annual CCR.	7000 – Consumer Confidence Reports Rule	VP BEGIN DATE: 07/01/XXXX VP END DATE: Open until returned to compliance, then SOX status date.** <i>Note: XXXX = Calendar year the system was in violation.</i>
72 – CCR Adequacy/Availability/Content	Major omissions or errors in content of CCR per WM directions.	7000 – Consumer Confidence Reports Rule	VP BEGIN DATE: Compliance period begin date.* VP END DATE: Open until returned to compliance, then SOX status date.**

Public Notice Rule: Determination Date = Status Date = NOV Date.

Violation			
Type	Description	Analyte Code	Period
75 – Public Notice Rule Linked to Violation	Failure to issue public notification by deadline.	7500 – Public Notice Rule	VP BEGIN DATE: Day after mandated deadline to perform public notification VP END DATE: Open until returned to compliance, then SOX status date.**
76 – Public Notice Rule NOT Linked to Violation	DO NOT USE.		

*Do NOT enter compliance period dates into SDWIS.

**A SOX enforcement action MUST be associated with the violation if a VP end date is entered.

CP – Compliance Period

VP – Violation Period

The following diagram explains the sequence for entering multiple running annual average PMCL violations for the same contaminant in consecutive compliance periods. In this example, this is a ground water waterworks monitoring for a metal contaminant initially once per three years.

1. A routine sample and confirmation sample were collected in 4th quarter of 1999 and the average of the two samples exceeded the MCL. The compliance period for the initial MCL violation is three years, the standard monitoring period 1/1/1999 to 12/31/2001. Subsequent monitoring frequency is then quarterly.
2. The MCL calculation is next performed after 4 quarters of data have been collected. The 4 quarter running annual average exceeds the MCL in this example once again and another violation letter will be issued at this point. The compliance period entered for this violation is 10/1/1999 through 9/30/2000. Note that this compliance period overlapped the compliance period entered for the first violation. Quarterly monitoring continues.
3. The next running annual average calculation is made for the compliance period 1/1/2000 through 12/31/2000. Again the MCL is exceeded, another violation notice is issued and the compliance period entered into SDWIS is 10/1/2000 through 12/31/2000.
4. Subsequent violation determinations, NOV issuances will be quarterly. The compliance period in SDWIS for these subsequent quarters is the last calendar quarter.

	1999				2000				2001			
	1 Qtr.	2 Qtr.	3 Qtr.	4 Qtr.	1 Qtr.	2 Qtr.	3 Qtr.	4 Qtr.	1 Qtr.	2 Qtr.	3 Qtr.	4 Qtr.
Metals sample X – sample collected				X	X	X	X	X	X			
1. Determination date: 1/2000 Compliance Period: 1/1/1999 – 12/31/2001	<p>1st violation for 3-year period</p>											
2. RAA calculation, determination date: 10/2000 Compliance Period: 10/1/1999 – 9/30/2000	<p>2nd violation 1-year period Running Annual Average</p>											
3. RAA calculation, determination date: 1/2001 Compliance Period: 10/1/2000 – 12/31/2000	<p>3rd violation Quarterly period Based on Running Annual Average</p>											
4. RAA calculation, determination date: 4/2001 Compliance Period: 1/1/2001 – 3/31/2001												